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HYDROLOGIC AND CLIMATOLOGIC DATA,
SOUTHEASTERN UINTA BASIN, UTAH AND COLORADO
WATER YEAR 1978
By Loretta S. Conroy

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Salt Lake City, Utah

1980

1. The first part of the paper is devoted to a discussion of the general principles of the theory of the structure of the atom. It is shown that the structure of the atom is determined by the laws of quantum mechanics, and that the laws of quantum mechanics are determined by the laws of the theory of the structure of the atom.

CONTENTS

	Page
Conversion factors	IV
Introduction	1
Well- and spring-numbering systems	1
Station-numbering system	2
Explanation of the tables.	2
References cited	4

ILLUSTRATIONS

Figure 1. Diagrams showing well- and spring-numbering systems used in Utah and Colorado.	3
2. Map showing precipitation-monitoring sites.	5
3. Map showing snow-monitoring sites	6
4. Map showing air-temperature monitoring sites.	7
5. Map showing streamflow-monitoring sites	8
6. Map showing ground-water monitoring sites	9

TABLES

Table 1. Monthly precipitation.	10
2. Depth-duration of rainfall	15
3. Snow depth and water content	21
4. Air temperature.	29
5. Stream-discharge and water-quality data at continuous- record stations.	35
6. Descriptions of ground-water sampling sites.	160
7. Quality of ground water.	162
8. Water levels, temperature, and specific conductance in selected wells	164

CONVERSION FACTORS

Most values in this report are given in inch-pound units. For those readers who may prefer to use metric units, the conversion factors for the terms used in this report are listed below.

Inch-pound			Metric	
Unit (Multiply)	Abbreviation	(by)	Unit (to obtain)	Abbreviation
Acre		0.4047	Square hectometer	hm ²
Acre-foot	acre-ft	0.001233	Cubic hectometer	hm ³
Cubic foot per second	ft ³ /s	0.02832	Cubic meter per second	m ³ /s
Foot	ft	0.3048	Meter	m
Gallon per minute	gal/min	0.06309	Liter per second	L/s
Inch	in.	25.40	Millimeter	mm
		2.540	Centimeter	cm
Mile	mi	1.609	Kilometer	km
Square mile	mi ²	2.590	Square kilometer	km ²
Ton		0.9072	Metric ton	t

Chemical concentration and water temperature are given in metric units. Chemical concentration is given in milligrams per liter (mg/L) or micrograms per liter (µg/L). Milligrams per liter is a unit expressing the concentration of chemical constituents in solution as weight (milligrams) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter. For concentrations less than 7,000 mg/L, the numerical value is about the same as for concentrations in parts per million.

Chemical concentration in terms of ionic interacting values is given in milliequivalents per liter (meq/L). Meq/L is numerically equal to equivalents per million.

Water temperature is given in degrees Celsius (°C), which can be converted to degrees Fahrenheit (°F) by the following equation: °F = 1.8(°C) + 32.

HYDROLOGIC AND CLIMATOLOGIC DATA,
SOUTHEASTERN UINTA BASIN, UTAH AND COLORADO
WATER YEAR 1978

by Loretta S. Conroy

INTRODUCTION

This report contains hydrologic and climatologic data that were collected as part of an investigation of the southeastern Uinta Basin, Utah and Colorado, by the U.S. Geological Survey. The data are mainly for the 1978 water year, which includes the period October 1977–September 1978. Conroy and Fields (1977) reported data collected mainly for water years 1975 and 1976, and Conroy (1979) reported data collected mainly for water year 1977.

The investigation encompasses the collection and interpretation of a variety of hydrologic, climatologic, and geologic information in and near the southeastern Uinta Basin in order to (1) define the natural hydrologic system according to the occurrence, use, quantity, and quality of water; (2) define various hydrologic characteristics such as the seasonal and areal distribution of temperature, precipitation, evapotranspiration, and streamflow; (3) determine the water demands that might be imposed on the hydrologic system as a result of oil-shale development; and (4) develop simulation models that could be used to predict the effects of various water-use plans that would satisfy these demands.

The data collection during water year 1978 was in cooperation with the Utah Department of Natural Resources, the U.S. Bureau of Land Management, and the U.S. Environmental Protection Agency.

WELL- AND SPRING-NUMBERING SYSTEMS

The system of numbering wells and springs in Utah is based on the cadastral land-survey system of the U.S. Government. The number, in addition to designating the well or spring, describes its position in the land net. By the land-survey system, the State is divided into four quadrants by the Salt Lake base line and meridian, and these quadrants are designated by the uppercase letters A, B, C, and D, indicating the northeast, northwest, southwest, and southeast quadrants, respectively. Numbers designating the township and range (in that order) follow the quadrant letter, and all three are enclosed in parentheses. The number after the parentheses indicates the section, and is followed by three letters indicating the quarter section, the quarter-quarter section, and the quarter-quarter-quarter section—generally 10 acres;¹ the letters a, b, c, and d indicate, respectively, the northeast, northwest, southwest, and southeast quarters of each subdivision. The number after the letters is the serial number of the well or spring within the 10-acre tract; the letter S preceding the serial number denotes a spring. If a well or spring cannot be located within a 10-acre

¹Although the basic land unit, the section, is theoretically 1 mi², many sections are irregular. Such sections are subdivided into 10-acre tracts, generally beginning at the southeast corner, and the surplus or shortage is taken up in the tracts along the north and west sides of the section.

tract, one or two location letters are used and the serial number is omitted. Thus, (D-10-22)10ada-1 designates the first well constructed or visited in the NE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 10, T. 10 S., R. 22 E., and (D-15-24)10bcd-S1 designates a spring in the SE $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 10, T. 15 S., R. 24 E. For sites located in half townships, the letter T precedes the spring or well number. Thus, T(D-15-21)36adc-S1 designates a spring in T. 15 $\frac{1}{2}$ S. The numbering system is illustrated in figure 1.

In Colorado, the well- and spring-numbering system also is based on the cadastral land-survey system, and in the Uinta Basin area the system is referenced to the base line and the Sixth principal meridian and is identified by the prefix letter S. Thus, spring S(C-5-104)27dad-S1 is in the SE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 27, T. 5 S., R. 104 W., Sixth principal meridian (fig. 1). In Colorado records, springs are not identified by the letter S preceding the serial number, but in this report, springs are so designated in order to clearly identify the nature of the water source.

In tables 6 and 7 the first six digits of the station-identification number represent north latitude in degrees, minutes, and seconds; the next seven digits represent west longitude in degrees, minutes, and seconds; the last two digits are a sequential number for that site.

STATION-NUMBERING SYSTEM

Records of streamflow at gaging stations are listed in downstream order. Station numbers are designated by the Geological Survey for regular streamflow stations. Water-quality and sediment stations operated at the streamflow-gaging stations are assigned the same number.

EXPLANATION OF THE TABLES

All terms used in the tables are standard terms, which are defined in annual basic-data reports of the U.S. National Oceanic and Atmospheric Administration and the Geological Survey.

Table 1 contains the estimated monthly precipitation at 21 storage gages operated by the Geological Survey (fig. 2). The storage gages could not be read precisely at the end of each month, thus the monthly readings were prorated on the basis of the distribution of precipitation at nearby daily-record sites operated by the National Oceanic and Atmospheric Administration.

In addition to storage-gage data collected by the Geological Survey, similar data are also collected at 19 other gages (P-16 to P-34--not shown in fig. 2) operated by other Federal agencies. Copies of these data are available in the files of the Geological Survey, Salt Lake City, Utah, and the original records are filed with the appropriate agencies.

Table 2 shows maximum rainfall depths for specified durations. The data were obtained at 13 of the storage-gage sites (fig. 2). The rainfall totals were measured as accumulated storage in a receiver pipe. The data were recorded at 5-minute intervals at eight sites and at 15-minute intervals at the other five sites. Data, recorded on digital tapes, were translated and tabulated by a mini-computer and scanned for storms. The recorded rainfall totals were checked by comparing corresponding totals recorded by the precipitation storage gages at the same sites.

Sections within a township

Tracts within a section

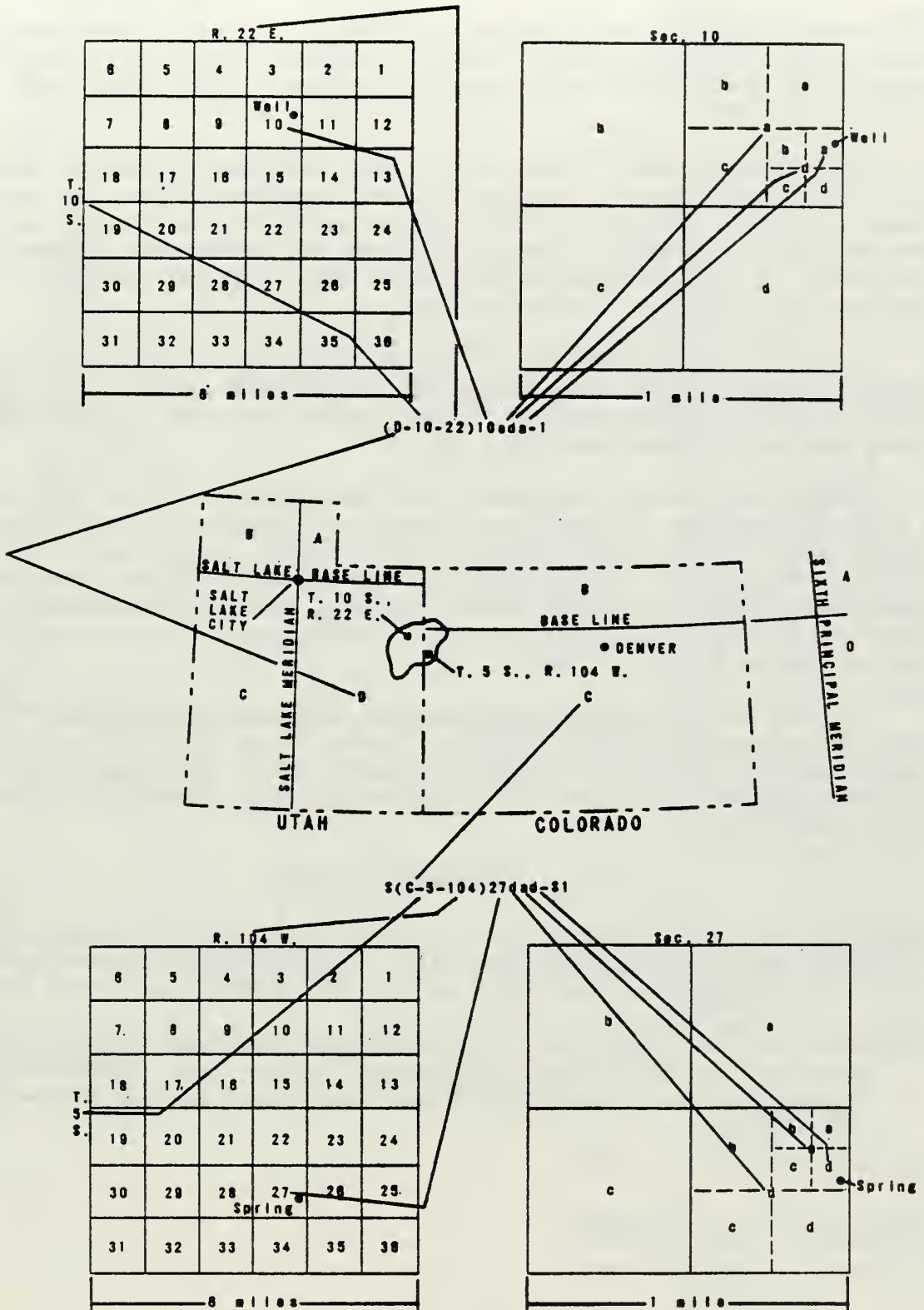


Figure 1.— Well- and spring-numbering systems used in Utah and Colorado.

Table 3 contains snow depth and water content measured at 24 sites at high altitudes in the study area (fig. 3). The depths and water contents were measured by a standard Montrose snow sampler.

Table 4 contains daily maximum, minimum, and mean air temperatures at five sites (fig. 4). The data were recorded hourly by digital-servo systems. Maximum-minimum thermometers were generally read monthly and values used to verify recorded extremes.

Table 5 shows daily values for stream discharge obtained at 20 continuous-record gaging stations. (See fig. 5.) Daily values of specific conductance, temperature, and sediment were obtained at selected sites, generally only for the period April-November. Data collection was discontinued during periods of ice cover. Also, additional water-quality data collected periodically during the year are given for 17 of the sites.

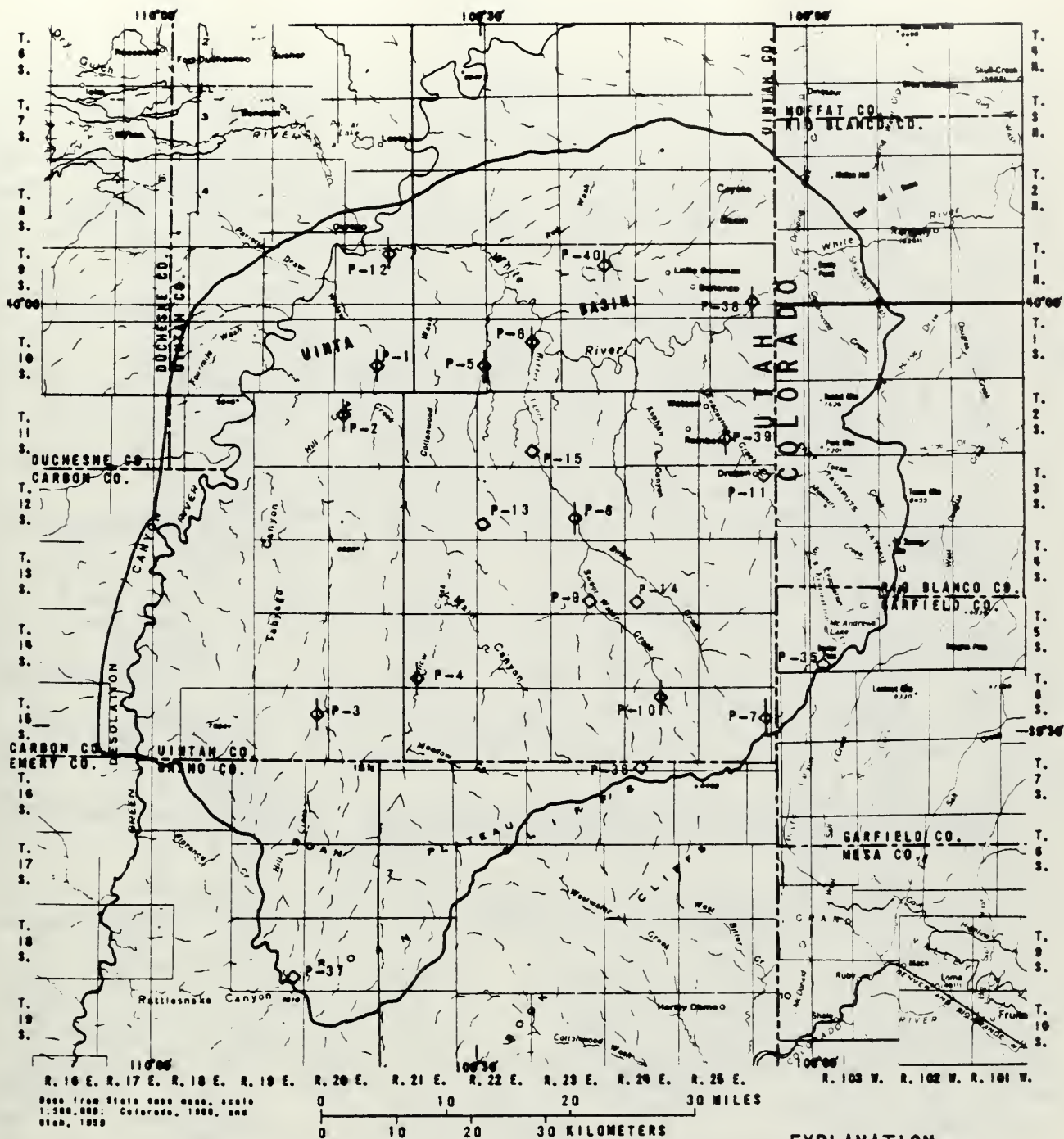
Table 5 also includes miscellaneous sediment data (not previously published) obtained at 23 sites during the 1975-76 water years. All the sediment data were collected at continuous-record gaging stations, but eight of the stations have been discontinued (fig. 5).

Tables 6-8 contain ground-water information for 55 sites (fig. 6). Table 6 gives descriptions for wells and springs not included in Conroy and Fields (1977, table 7) and Conroy (1979, table 7). Table 7 contains chemical analyses of water and periodic water-discharge, temperature, and specific-conductance measurements made at selected sites. Table 8 contains measurements of water levels in selected wells, and, when available, temperature and specific conductance of the water.


Because data collection was discontinued during October 1978, the hydrologic and climatologic data listed in tables 1-4 and 6-8 will not be available for future years. Data collection is continuing at 18 streamflow sites and 1 well in alluvium; results will be reported in annual basic-data reports of the Geological Survey.

REFERENCES CITED

- Conroy, L. S., 1979, Hydrologic and climatologic data, southeastern Uinta Basin, Utah and Colorado, water year 1977: U.S. Geological Survey Open-File Report 79-1493 (also duplicated as Utah Hydrologic-Data Report 33), 193 p.
- Conroy, L. S., and Fields, F. K., 1977, Climatologic and hydrologic data, southeastern Uinta Basin, Utah and Colorado, water years 1975 and 1976: U.S. Geological Survey open-file release (duplicated as Utah Basic-Data Release 29), 244 p.



EXPLANATION

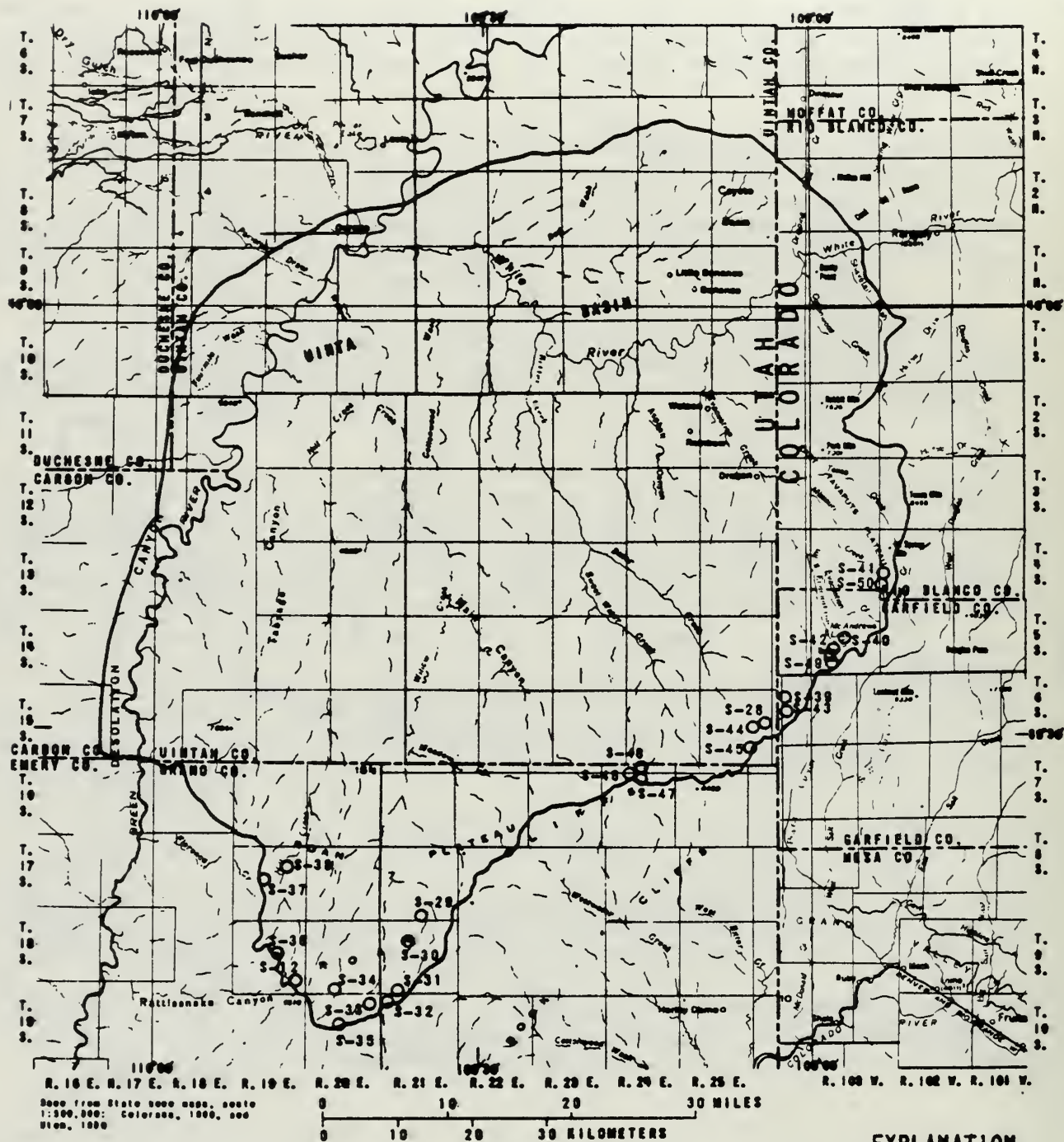
 P-9
 Monthly precipitation only (table 1)

 P-1
 Depth-duration of rainfall (table 2)
 in addition to monthly precipitation

Number by symbol is identifier in
 tables 1 and 2


 Boundary of study area

Figure 2.—Precipitation-monitoring sites.

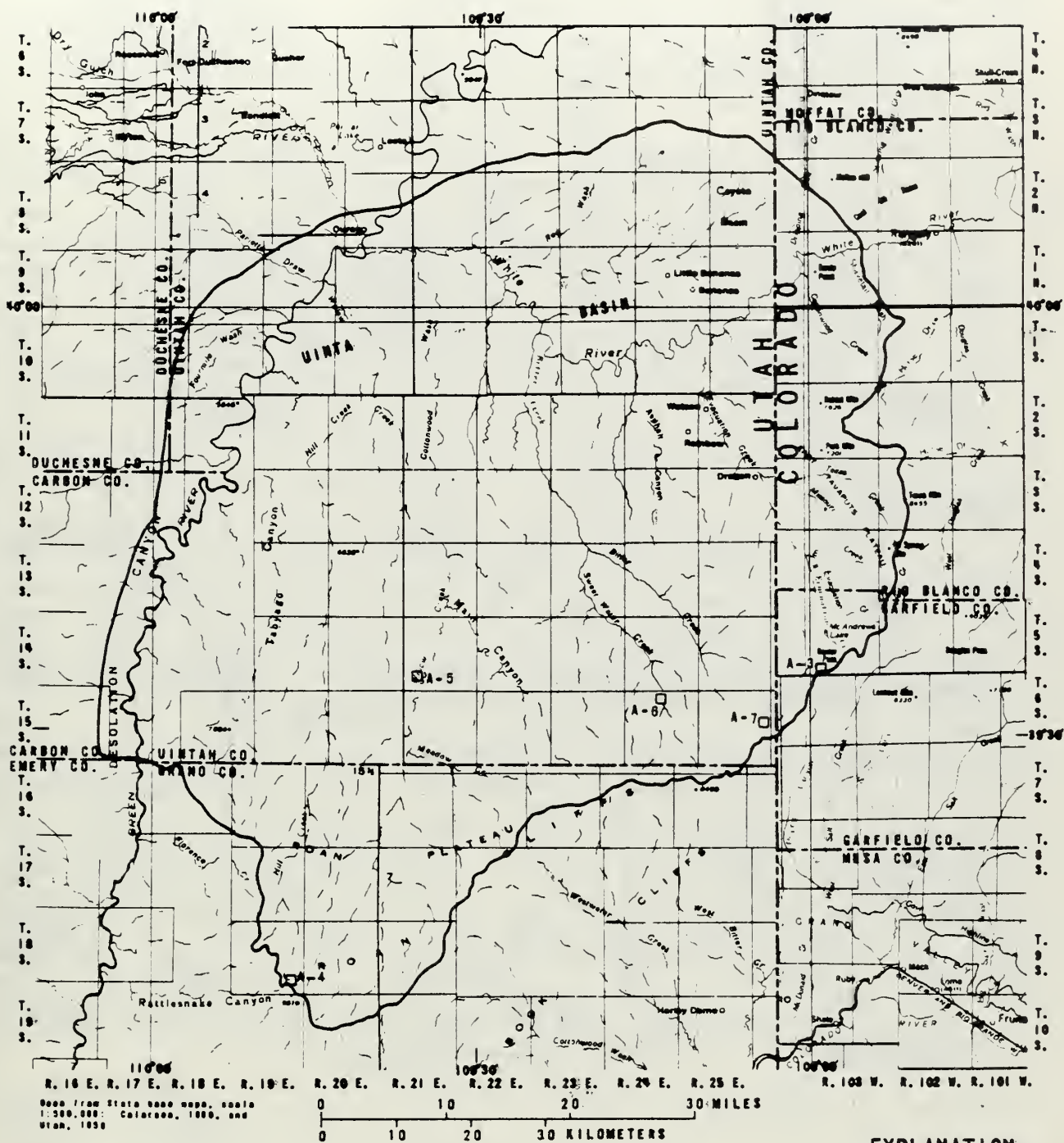


EXPLANATION

S-28
Snow site
Number by symbol is
identifier in table 3

Boundary of study area

Figure 3.— Snow-monitoring sites.



EXPLANATION

□ A-3
 Air-temperature gage
 Number by symbol is
 identifier in table 4

Boundary of study area

Figure 4.— Air-temperature monitoring sites.

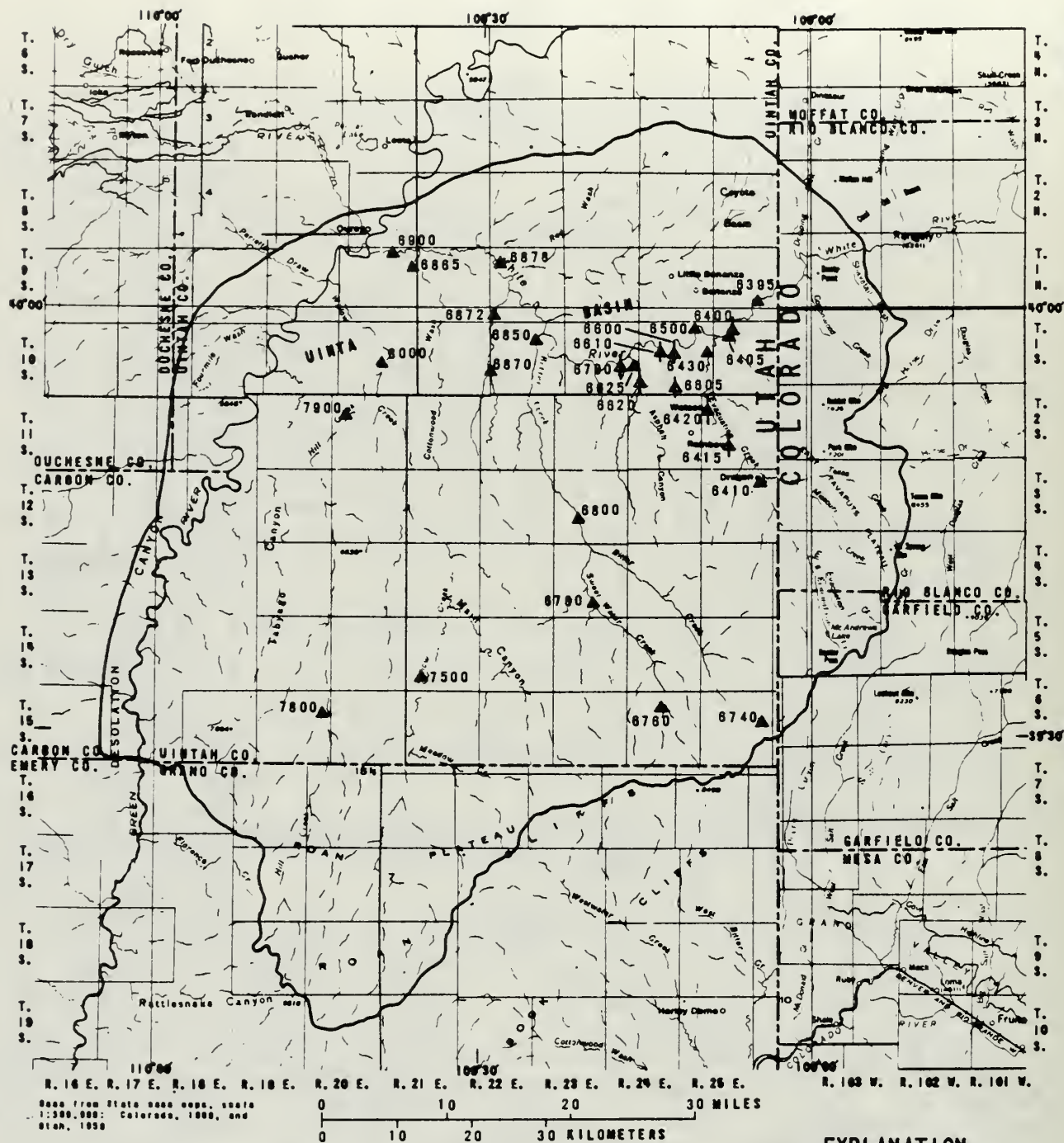
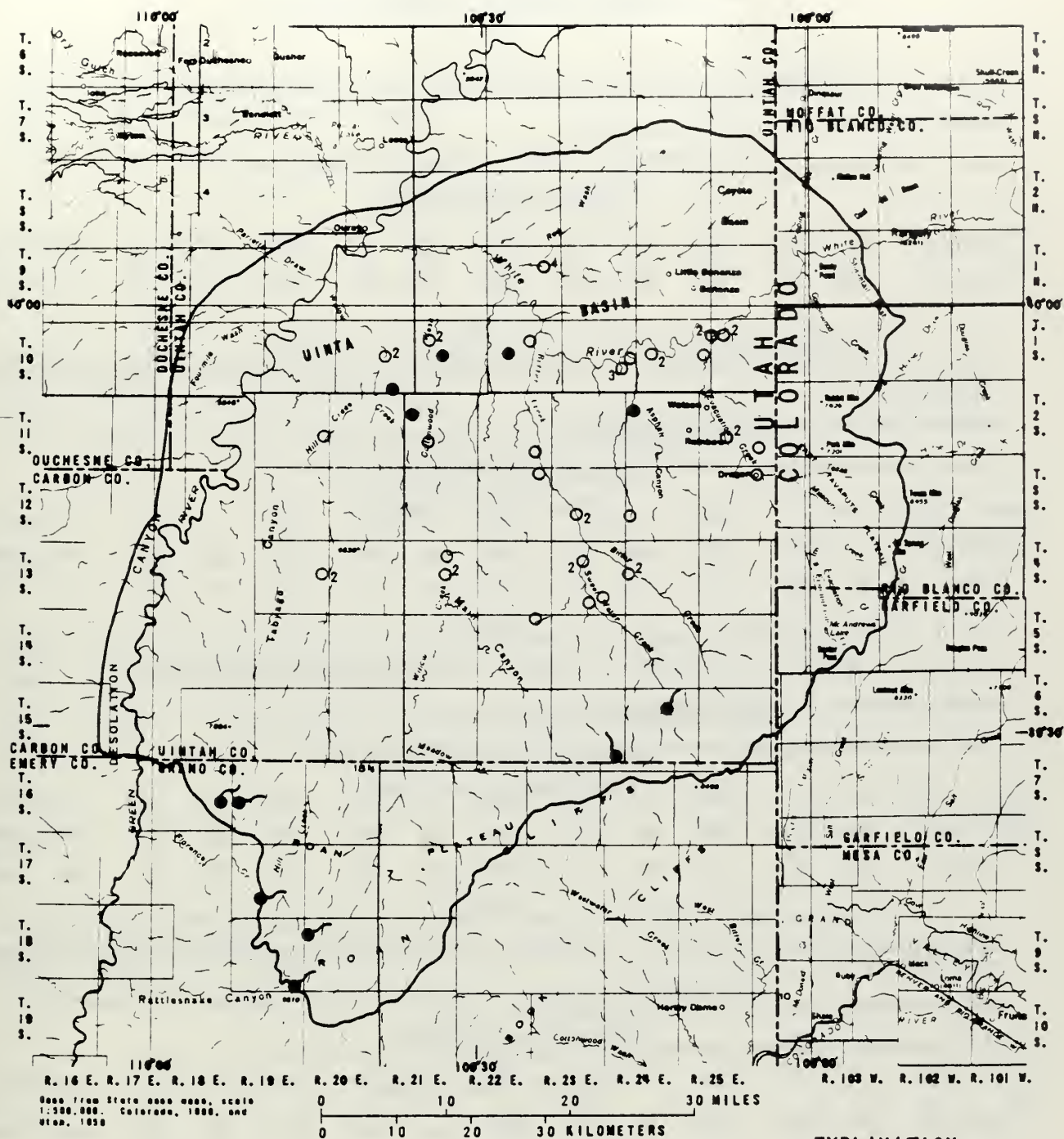


Figure 5.— Streamflow-monitoring sites.



EXPLANATION

● Flowing Well
 ○ Nonflowing Well
 ○ Spring

Number by symbol indicates number of wells or springs represented

Boundary of study area

Ground-water data are listed in tables 6-8

Figure 6.—Ground-water monitoring sites.

TABLE 1.—MONTHLY PRECIPITATION

P-1

LOCATION.—Lat 39°56'20", long 109°38'52", in NE¼NW¼NE¼ sec.22, T.10 S., R.20 E., Uintah County, Utah.

PERIOD OF RECORD.—November 1974 to current year.

GAGE.—Precipitation-storage gage. Altitude of gage is 4,860 ft (1,481 m) from topographic map.

PRECIPITATION, IN INCHES

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Annual
1978	0.29	.71	.23	.92	.22	1.54	.81	.48	.29	0.00	.10	.20	5.79

P-2

LOCATION.—Lat 39°52'35", long 109°42'12", in SE¼SE¼NW¼ sec.8, T.11 S., R.20 E., Uintah County, Uintah and Ouray Indian Reservation, Utah.

PERIOD OF RECORD.—November 1974 to current year.

GAGE.—Precipitation-storage gage. Altitude of gage is 5,060 ft (1,542 m) from topographic map.

PRECIPITATION, IN INCHES

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Annual
1978	.58	.99	.16	.72	.22	1.42	.29	.07	.02	.60	.60	.25	5.92

P-3

LOCATION.—Lat 39°31'33", long 109°44'02", in NW¼NE¼SE¼ sec.12, T.15 S., R.19 E., Uintah County, Utah.

PERIOD OF RECORD.—November 1974 to current year.

GAGE.—Precipitation-storage gage. Altitude of gage is 6,470 ft (1,972 m) from topographic map.

PRECIPITATION, IN INCHES

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Annual
1978	.29	.63	.57	1.06	.70	1.41	1.55	.56	.18	.20	.90	.50	8.55

P-4

LOCATION.—Lat 39°33'59", long 109°35'12", in NE¼SW¼SE¼ sec.29, T.14 S., R.21 E., Uintah County, Uintah and Ouray Indian Reservation, Utah.

PERIOD OF RECORD.—November 1974 to current year.

GAGE.—Precipitation-storage gage. Altitude of gage is 6,000 ft (1,829 m) from topographic map.

PRECIPITATION, IN INCHES

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Annual
1978	—	.70	.94	1.08	.35	.85	1.77	.36	.11	.03	.87	.20	—

P-5

LOCATION.—Lat 39°55'51", long 109°29'45", in NE¼NW¼SE¼ sec.24, T.10 S., R.21 E., Uintah County, Utah.

PERIOD OF RECORD.—November 1974 to current year.

GAGE.—Precipitation-storage gage. Altitude of gage is 5,150 ft (1,570 m) from topographic map.

PRECIPITATION, IN INCHES

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Annual
1978	.43	.43	.81	.98	.18	1.21	1.37	.11	.20	.02	.44	.12	6.30

TABLE 1.—MONTHLY PRECIPITATION—Continued

P-6

LOCATION.—Lat 39°57'56", long 109°24'59", in NE¼SE¼NE¼ sec.10, T.10 S., R.22 E., Uintah County, Utah.

PERIOD OF RECORD.—November 1974 to current year.

GAGE.—Precipitation-storage gage. Altitude of gage is 4,780 ft (1,457 m) from topographic map.

PRECIPITATION, IN INCHES

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Annual
1978	.58	.68	.56	.96	.30	1.27	1.24	.53	.17	.01	.46	.25	7.01

P-7

LOCATION.—Lat 39°31'04", long 109°04'16", in SE¼NW¼NW¼ sec.13, T.15 S., R.25 E., Uintah County, Utah.

PERIOD OF RECORD.—November 1974 to current year.

GAGE.—Precipitation-storage gage. Altitude of gage is 7,040 ft (2,146 m) from topographic map.

PRECIPITATION, IN INCHES

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Annual
1978	.99	1.01	.74	3.44	.92	2.99	2.46	1.70	.03	.12	.90	.40	15.70

P-8

LOCATION.—Lat 39°45'12", long 109°21'15", in SW¼SW¼SW¼ sec.21, T.12 S., R.23 E., Uintah County, Utah.

PERIOD OF RECORD.—November 1974 to current year.

GAGE.—Precipitation-storage gage. Altitude of gage is 5,570 ft (1,698 m) from topographic map.

PRECIPITATION, IN INCHES

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Annual
1978	.65	1.98	.87	1.06	.20	1.20	1.27	.59	0.00	.05	1.60	.10	9.57

P-9

LOCATION.—Lat 39°39'29", long 109°19'58", in SW¼SE¼NW¼ sec.27, T.13 S., R.23 E., Uintah County, Utah.

PERIOD OF RECORD.—November 1974 to current year.

GAGE.—Precipitation-storage gage. Altitude of gage is 6,000 ft (1,829 m) from topographic map.

PRECIPITATION, IN INCHES

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Annual
1978	.83	.54	.29	1.14	.27	1.05	.88	1.42	1.10	.90	.60	0.00	9.02

P-10

LOCATION.—Lat 39°32'12", long 109°13'21", in NE¼SW¼SW¼ sec.3, T.15 S., R.24 E., Uintah County, Utah.

PERIOD OF RECORD.—November 1974 to current year.

GAGE.—Precipitation-storage gage. Altitude of gage is 6,820 ft (2,079 m) from topographic map.

PRECIPITATION, IN INCHES

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Annual
1978	.72	1.17	.40	1.82	.48	1.96	1.06	1.37	.25	.17	1.03	.25	10.68

TABLE 1.—MONTHLY PRECIPITATION—Continued

P-11

LOCATION.—Lat 39°48'04", long 109°04'26", in SW¼SW¼SW¼ sec.1, T.12 S., R.25 E., Uintah County, Utah.

PERIOD OF RECORD.—November 1974 to current year.

GAGE.—Precipitation-storage gage. Altitude of gage is 5,680 ft (1,731 m) from topographic map.

PRECIPITATION, IN INCHES

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Annual
1978	1.03	1.55	.24	.96	.20	1.42	1.24	1.42	.05	.04	1.21	.07	9.43

P-12

LOCATION.—Lat 40°03'54", long 109°38'06", in SE¼SE¼NW¼ sec.2, T.9 S., R.20 E., Uintah County, Utah.

PERIOD OF RECORD.—November 1974 to current year.

GAGE.—Precipitation-storage gage. Altitude of gage is 4,655 ft (1,419 m) from topographic map.

PRECIPITATION, IN INCHES

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Annual
1978	.31	.62	.08	1.13	.25	1.15	1.39	.57	.22	.02	.76	.30	6.80

P-13

LOCATION.—Lat 39°44'22", long 109°29'55", in NE¼SE¼SW¼ sec.30, T.12 S., R.22 E., Uintah County, Utah.

PERIOD OF RECORD.—November 1974 to current year.

GAGE.—Precipitation-storage gage. Altitude of gage is 6,240 ft (1,902 m) from topographic map.

PRECIPITATION, IN INCHES

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Annual
1978.	.48	.28	.47	.38	.20	1.57	1.09	.44	.10	.03	.94	.14	6.12

P-14

LOCATION.—Lat 39°38'46", long 109°16'00", in NW¼SE¼NE¼ sec.31, T.13 S., R.24 E., Uintah County, Utah.

PERIOD OF RECORD.—November 1974 to current year.

GAGE.—Precipitation-storage gage. Altitude of gage is 6,620 ft (2,018 m) from topographic map.

PRECIPITATION, IN INCHES

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Annual
1978	.64	.41	.29	.93	.18	1.35	1.18	1.47	.20	.05	1.71	.14	8.55

P-15

LOCATION.—Lat 39°49'33", long 109°24'28", in SE¼SE¼SE¼ sec.26, T.11 S., R.22 E., Uintah County, Utah.

PERIOD OF RECORD.—November 1974 to current year.

GAGE.—Precipitation-storage gage. Altitude of gage is 5,340 ft (1,628 m) from topographic map.

PRECIPITATION, IN INCHES

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Annual
1978	.65	1.52	.41	.87	.90	1.02	.58	.16	0.00	.02	.58	.20	6.91

TABLE 1.—MONTHLY PRECIPITATION—Continued

P-35

LOCATION.—Lat 39°34'41", long 108°58'21", in NE¼NE¼SE¼ sec.33, T.5 S., R.103 W., Garfield County, Colo.

PERIOD OF RECORD.—September 1975 to current year.

GAGE.—Precipitation-storage gage. Altitude of gage is 8,330 ft (2,539 m) from topographic map.

PRECIPITATION, IN INCHES

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Annual
1978	—	2.07	1.48	5.90	1.43	4.36	3.58	.97	.31	.03	.90	.36	—

P-36

LOCATION.—Lat 39°27'32", long 109°15'08", in NE¼NW¼SE¼ sec.34, T.15½ S., R.24 E., Grand County, Utah.

PERIOD OF RECORD.—September 1975 to current year.

GAGE.—Precipitation-storage gage. Altitude of gage is 7,740 ft (2,359 m) from topographic map.

PRECIPITATION, IN INCHES

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Annual
1978	—	.76	1.11	4.42	1.07	4.70	2.55	.69	.22	.02	.84	.33	—

P-37

LOCATION.—Lat 39°12'49", long 109°46'26", in NE¼NE¼SW¼ sec.25, T.18 S., R.19 E., Grand County, Utah.

PERIOD OF RECORD.—September 1975 to current year.

GAGE.—Precipitation-storage gage. Altitude of gage is 9,320 ft (2,841 m) from topographic map.

PRECIPITATION, IN INCHES

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Annual
1978	1.38	.46	1.64	6.56	1.59	8.00	2.86	.78	.24	.02	.52	.20	24.25

P-38

LOCATION.—Lat 40°00'50", long 109°04'48", in NW¼NE¼NE¼ sec.27, T.9 S., R.25 E., Uintah County, Utah.

PERIOD OF RECORD.—October 1976 to current year.

GAGE.—Precipitation-storage gage. Altitude of gage is 5,030 ft (1,533 m) from topographic map.

PRECIPITATION, IN INCHES

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Annual
1978	1.08	.89	.44	.99	.41	.64	1.66	.43	.13	.02	.68	.30	7.67

P-39

LOCATION.—Lat 39°50'44", long 109°07'48", in SW¼NW¼SW¼ sec.21, T.11 S., R.25 E., Uintah County, Utah.

PERIOD OF RECORD.—May to September 1977.

GAGE.—Precipitation-storage gage. Altitude of gage is 5,500 ft (1,676 m) from topographic map.

PRECIPITATION, IN INCHES

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Annual
1978	—	—	—	—	—	.34 ¹	.93	.33	—	—	—	—	—

¹ Partial record.

TABLE 1.—MONTHLY PRECIPITATION—Continued

P-40

LOCATION.—Lat 40°02'42", long 109°18'45", in NE¼SE¼SE¼ sec.10, T.9 S., R.23 E., Uintah County, Utah.

PERIOD OF RECORD.—June to September 1977.

GAGE.—Precipitation-storage gage. Altitude of gage is 4,940 ft (1,506 m) from topographic map.

PRECIPITATION, IN INCHES

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Annual
1978	—	—	—	—	—	.34 ¹	1.83	.19	.02	1.43	.72	1.58	—

¹Partial record.

TABLE 2.--DEPTH-DURATION OF RAINFALL

Location: See fig. 2 and table 1 for location of sites.

P-1

MAXIMUM DEPTH (inches)

	5	15	30	1	2	3	6	12	24
	min	min	min	hr	hr	hr	hr	hr	hr
1978									
MARCH	-	-	-	-	-	-	-	-	-
APRIL	0.01	0.02	0.04	0.04	0.07	0.21	0.46	0.46	0.46
MAY	.01	.04	.10	.12	.14	.15	.15	.15	.15
JUNE	.01	.01	.01	.01	.02	.02	.02	.02	.02
JULY	.01	.01	.01	.01	.02	.02	.02	.02	.02
AUGUST	.03	.07	.08	.08	.11	.11	.11	.11	.11
SEPTEMBER	.03	.04	.09	.14	.15	.15	.15	.15	.15

SEASONAL SUMMARY

DATE	(1)	8-12	5-1	9-19	9-16	4-27	4-27	4-27	4-27
MAX DEPTH	0.03	0.07	0.10	0.14	0.15	0.21	0.46	0.46	0.46

P-2

1978									
MARCH	-	-	-	-	-	-	-	-	-
APRIL	-	0.01	0.02	0.08	0.18	0.32	0.32	0.32	0.32
MAY	-	.04	.04	.04	.05	.08	.08	.08	.08
JUNE	-	-	-	-	-	-	-	-	-
JULY	-	.01	.01	.01	.01	.02	.02	.02	.02
AUGUST	-	.01	.01	.02	.06	.11	.13	.13	.13
SEPTEMBER	-	.02	.08	.13	.15	.16	.16	.16	.16

SEASONAL SUMMARY

DATE	-	5-1	9-16	9-16	4-27	4-27	4-27	4-27	4-27
MAX DEPTH	-	0.04	0.08	0.13	0.18	0.32	0.32	0.32	0.32

¹Aug. 12, Sept. 6.

TABLE 2.--DEPTH-DURATION OF RAINFALL--Continued

P-3

	MAXIMUM DEPTH (inches)								
	5 min	15 min	30 min	1 hr	2 hr	3 hr	6 hr	12 hr	24 hr
1978									
MARCH	-	-	-	-	-	-	-	-	-
APRIL	0.06	0.06	0.06	0.10	0.18	0.32	0.52	0.52	0.52
MAY	.06	.10	.12	.18	.20	.20	.20	.20	.20
JUNE	-	-	-	-	-	-	-	-	-
JULY	.06	.06	.06	.06	.06	.06	.06	.06	.06
AUGUST	.06	.08	.10	.40	.50	.50	.50	.50	.50
SEPTEMBER	.06	.06	.12	.12	.18	.48	.52	.52	.52

SEASONAL SUMMARY

DATE	(1)	5-21	(2)	8-12	8-12	8-12	(3)	(4)	(5)
MAX DEPTH	0.06	0.10	0.12	0.40	0.50	0.50	0.52	0.52	0.52

P-4

1978									
MARCH	-	-	-	-	-	-	-	-	-
APRIL	-	0.03	0.03	0.03	0.05	0.13	0.16	0.16	0.16
MAY	-	.06	.13	.25	.26	.27	.27	.27	.27
JUNE	.01	.01	.01	.01	.07	.07	.07	.07	.07
JULY	0	0	0	0	0	0	0	0	0
AUGUST	.08	.10	.18	.23	.26	.37	.38	.38	.38
SEPTEMBER	.01	.02	.05	.07	.14	.14	.15	.15	.15

SEASONAL SUMMARY

DATE	8-13	8-13	8-14	5-21	(6)	8-14	8-14	8-14	8-14
MAX DEPTH	0.08	0.10	0.18	0.25	0.26	0.37	0.38	0.38	0.38

¹Apr. 30, May 18, July 27, Aug. 14, Sept. 11.

²May 21, Sept. 17.

³Apr. 18, Sept. 17.

⁴Apr. 18, Sept. 17

⁵Apr. 18, Sept. 17

⁶Aug. 14, May 21.

TABLE 2.--DEPTH-DURATION OF RAINFALL--Continued

P-5

MAXIMUM DEPTH (inches)

	5	15	30	1	2	3	6	12	24
	min	min	min	hr	hr	hr	hr	hr	hr
1978									
MARCH	-	-	-	-	-	-	-	-	-
APRIL	-	0.10	0.12	0.12	0.20	0.32	0.44	0.44	0.44
MAY	-	.08	.12	.12	.18	.18	.18	.18	.18
JUNE	0	0	0	0	0	0	0	0	0
JULY	-	.06	.06	.06	.06	.06	.06	.06	.06
AUGUST	-	.06	.10	.18	.20	.22	.22	.22	.22
SEPTEMBER	-	.16	.18	.18	.20	.20	.20	.20	.20

SEASONAL SUMMARY

DATE	-	9-7	9-7	(1)	(2)	4-27	4-27	4-27	4-27
MAX DEPTH	-	0.16	0.18	0.18	0.20	0.32	0.44	0.44	0.44

P-6

1978									
MARCH	-	-	-	-	-	-	-	-	-
APRIL	0.02	0.02	0.04	0.14	0.20	0.20	0.52	0.52	0.52
MAY	.06	.10	.14	.14	.14	.14	.14	.14	.14
JUNE	.02	.02	.02	.02	.02	.02	.02	.02	.02
JULY	.02	.02	.02	.02	.02	.02	.02	.02	.02
AUGUST	.02	.08	.10	.22	.28	.28	.30	.30	.30
SEPTEMBER	.02	.08	.38	.40	.40	.40	.40	.40	.40

SEASONAL SUMMARY

DATE	5-6	5-1	9-7	9-7	9-7	9-7	4-27	4-27	4-27
MAX DEPTH	0.06	0.10	0.38	0.40 ¹	0.40	0.40	0.52	0.52	0.52

P-7

1978									
MARCH	-	-	-	-	-	-	-	-	-
APRIL	-	-	-	-	-	-	-	-	-
MAY	0.04	0.09	0.15	0.29	0.36	0.37	0.61	0.62	0.62
JUNE	.02	.05	.05	.05	.06	.06	.06	.06	.06
JULY	.04	.04	.05	.05	.14	.14	.14	.14	.14
AUGUST	.01	.04	.04	.08	.14	.21	.29	.29	.29
SEPTEMBER	.05	.05	.05	.06	.06	.06	.06	.06	.06

SEASONAL SUMMARY

DATE	9-9	5-21	5-21	5-21	5-21	5-21	5-21	5-21	5-21
MAX DEPTH	0.05	0.09	0.15	0.29	0.36	0.37	0.61	0.62	0.62

¹Aug. 14, Sept. 7.²Apr. 27, Aug. 14, Sept. 7.

TABLE 2.--DEPTH-DURATION OF RAINFALL--Continued

P-8

MAXIMUM DEPTH (inches)

	5	15	30	1	2	3	6	12	24
	min	min	min	hr	hr	hr	hr	hr	hr
1978									
MARCH	-	-	-	-	-	-	-	-	-
APRIL	-	0.02	0.06	0.10	0.12	0.12	0.34	0.34	0.34
MAY	-	.04	.06	.08	.10	.10	.10	.10	.10
JUNE	.01	.06	.08	.09	.40	.45	.48	.48	.48
JULY	.01	.01	.01	.47	.48	.49	.51	.51	.51
AUGUST	.07	.07	.07	.08	.08	.08	.08	.08	.08
SEPTEMBER	.01	.03	.04	.06	.06	.06	.06	.06	.06

SEASONAL SUMMARY

DATE	8-22	8-22	6-29	7-16	7-16	7-16	7-16	7-16	7-16
MAX DEPTH	0.07	0.07	0.08	0.47	0.48	0.49	0.51	0.51	0.51

P-10

1978									
MARCH	0.03	0.08	0.13	0.18	0.18	0.19	0.21	0.21	0.21
APRIL	.01	.04	.06	.13	.20	.20	.27	.28	.28
MAY	.02	.10	.17	.22	.26	.26	.37	.37	.37
JUNE	.01	.05	.06	.07	.08	.08	.08	.08	.08
JULY	.08	.25	.25	.25	.26	.26	.26	.26	.26
AUGUST	.02	.04	.07	.10	.29	.29	.30	.30	.30
SEPTEMBER	.10	.10	.10	.10	.10	.10	.19	.26	.26

SEASONAL SUMMARY

DATE	9-4	7-19	7-19	7-19	8-13	8-13	5-21	5-21	5-21
MAX DEPTH	0.10	0.25	0.25	0.25	0.29	0.29	0.37	0.37	0.37

P-12

1978									
MARCH	-	0.06	0.06	0.06	0.10	0.10	0.10	0.10	0.10
APRIL	-	-	-	-	-	-	-	-	-
MAY	-	.02	.08	.12	.12	.12	.12	.12	.12
JUNE	-	.02	.02	.02	.02	.04	.04	.04	.04
JULY	-	.06	.06	.06	.06	.08	.08	.08	.08
AUGUST	-	.08	.12	.12	.12	.12	.12	.12	.12
SEPTEMBER	-	.22	.22	.22	.22	.22	.22	.22	.22
OCTOBER	-	.02	.10	.12	.12	.12	.18	.18	.18

SEASONAL SUMMARY

DATE	-	9-17	9-17	9-17	9-17	9-17	9-17	9-17	9-17
MAX DEPTH	-	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22

TABLE 2.--DEPTH-DURATION OF RAINFALL--Continued

P-38

	MAXIMUM DEPTH (inches)								
	5 min	15 min	30 min	1 hr]	2 hr	3 hr	6 hr	12 hr	24 hr
1978									
MARCH	-	0.04	0.06	0.07	0.15	0.21	0.25	0.26	0.26
APRIL	-	.09	.11	.13	.16	.16	.25	.35	.35
MAY	.02	.05	.08	.13	.13	.13	.15	.15	.15
JUNE	-	-	-	-	-	-	-	-	-
JULY	0	0	0	0	0	0	0	0	0
AUGUST	.02	.04	.08	.11	.18	.22	.24	.25	.25
SEPTEMBER	.01	.04	.09	.14	.15	.15	.15	.15	.15

SEASONAL SUMMARY

DATE	(1)	4-16	4-16	9-18	8-14	8-14	(2)	4-27	4-27
MAX DEPTH	0.02	0.09	0.11	0.14	0.18	0.22	0.25	0.35	0.35

P-39

1978									
MARCH	-	0.10	0.12	0.20	0.38	0.40	0.40	0.40	0.40
APRIL	-	.06	.08	.10	.10	.20	.20	.20	.20
MAY	-	.06	.06	.06	.06	.08	.08	.08	.08
JUNE	-	-	-	-	-	-	-	-	-
JULY	-	-	-	-	-	-	-	-	-
AUGUST	-	-	-	-	-	-	-	-	-
SEPTEMBER	-	-	-	-	-	-	-	-	-

SEASONAL SUMMARY

DATE	-	3-31	3-31	3-24	3-24	3-24	3-24	3-24	3-24
MAX DEPTH	-	0.10	0.12	0.20	0.38	0.40	0.40	0.40	0.40

¹May 28, Aug. 13.²Mar. 24, Apr. 27.

TABLE 2.--DEPTH-DURATION OF RAINFALL--Continued

P-40

	MAXIMUM DEPTH (inches)								
	5 min	15 min	30 min	1 hr	2 hr	3 hr	6 hr	12 hr	24 hr
1978									
MARCH	0.02	0.05	0.09	0.09	0.12	0.13	0.13	0.13	0.13
APRIL	.03	.07	.12	.13	.15	1.31	1.33	1.33	1.33
MAY	.01	.02	.02	.02	.03	.04	.05	.05	.05
JUNE	-	0	0	0	0	0	0	0	0
JULY	-	0	0	0	0	0	0	0	0
AUGUST	-	.01	.03	.13	.26	.26	.28	.28	.28
SEPTEMBER	-	.04	.06	.06	1.02	1.02	1.02	1.02	1.02

SEASONAL SUMMARY

DATE	4-27	4-27	4-27	(1)	9-18	4-27	4-27	4-27	4-27
MAX DEPTH	0.03	0.07	0.12	0.13	1.02	1.31	1.33	1.33	1.33

¹Apr. 27, Aug. 14.

TABLE 3.--SNOW DEPTH AND WATER CONTENT

S-12

LOCATION.--Lat 39°13'07", long 109°46'15", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 25, T.18 S., R.19 E., Grand County, Utah.

PERIOD OF RECORD.--November 1974 to current year.

GAGE.--None. Altitude of measuring site is 9,320 ft (2,841 m) from topographic map.

Date	Snow depth (inches)	Water content (inches)
Feb. 15, 1978	49.5	15.2
Mar. 28	60.5	23.1

S-28

LOCATION.--Lat 39°31'04", long 109°04'16", in SE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 13, T.15 S., R.25 E., Uintah County, Utah.

PERIOD OF RECORD.--April 1976 to current year.

GAGE.--None. Altitude of measuring site is 7,040 ft (2,146 m) from topographic map.

Date	Snow depth (inches)	Water content (inches)
Mar. 27, 1978	13.8	6.7

S-29

LOCATION.--Lat 39°17'19", long 109°35'07", in NW $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 34, T.17 S., R.21 E., Grand County, Utah.

PERIOD OF RECORD.--April 1976 to current year.

GAGE.--None. Altitude of measuring site is 7,400 ft (2,255 m) from topographic map.

Date	Snow depth (inches)	Water content (inches)
Mar. 27, 1978	13.8	2.8

TABLE 3.--SNOW DEPTH AND WATER CONTENT--Continued

S-30

LOCATION.--Lat 39°15'13", long 109°36'23", in NE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 9, T.18 S., R.21 E., Grand County, Utah.

PERIOD OF RECORD.--April 1976 to current year.

GAGE.--None. Altitude of measuring site is 7,820 ft (2,384 m) from topographic map.

Date	Snow depth (inches)	Water content (inches)
Mar. 27, 1978	23.8	7.7

S-31

LOCATION.--39°12'29", long 109°37'22", in NW $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$, sec. 32, T.18 S., R.21 E., Grand County, Utah.

PERIOD OF RECORD.--April 1976 to current year.

GAGE.--None. Altitude of measuring site is 9,040 ft (2,755 m) from topographic map.

Date	Snow depth (inches)	Water content (inches)
Mar. 27, 1978	48.8	18.3

S-32

LOCATION.--Lat 39°10'26", long 109°38'35", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 6, T.19 S., R.21 E., Grand County, Utah.

PERIOD OF RECORD.--April 1976 to current year.

GAGE.--None. Altitude of measuring site is 8,400 ft (2,560 m) from topographic map.

Date	Snow depth (inches)	Water content (inches)
Mar. 27, 1978	41.0	18.0

TABLE 3.--SNOW DEPTH AND WATER CONTENT--Continued

S-33

LOCATION.--Lat 39°10'25", long 109°40'33" (unsurveyed), T.19 S., R.20 E., Grand County, Utah.

PERIOD OF RECORD.--April 1976 to current year.

GAGE.--None. Altitude of measuring site is 8,230 ft (2,509 m) from topographic map.

Date	Snow depth (inches)	Water content (inches)
Mar. 28, 1978	45.3	19.3

S-34

LOCATION.--Lat 39°11'42", long 109°42'59" (unsurveyed), T.18 S., R.20 E., Grand County, Utah.

PERIOD OF RECORD.--April 1976 to current year.

GAGE.--None. Altitude of measuring site is 7,800 ft (2,377 m) from topographic map.

Date	Snow depth (inches)	Water content (inches)
Mar. 28, 1978	42.7	18.5

S-35

LOCATION.--Lat 39°09'00", long 109°43'29", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 16, T.19 S., R.20 E., Grand County, Utah.

PERIOD OF RECORD.--April 1976 to current year.

GAGE.--None. Altitude of measuring site is 8,340 ft (2,542 m) from topographic map.

Date	Snow depth (inches)	Water content (inches)
Mar. 28, 1978	45.5	18.7

TABLE 3.--SNOW DEPTH AND WATER CONTENT--Continued

S-36

LOCATION.--Lat 39°14'23", long 109°48'09", in SW $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 15, T.18 S., R.19 E., Grand County, Utah.

PERIOD OF RECORD.--April 1976 to current year.

GAGE.--None. Altitude of measuring site is 9,280 ft (2,829 m) from topographic map.

Date	Snow depth (inches)	Water content (inches)
Mar. 28, 1978	45.7	14.7

S-37

LOCATION.--Lat 39°19'43", long 109°49'00", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 16, T.17 S., R.19 E., Grand County, Utah.

PERIOD OF RECORD.--April 1976 to current year.

GAGE.--None. Altitude of measuring site is 8,800 ft (2,682 m) from topographic map.

Date	Snow depth (inches)	Water content (inches)
Mar. 28, 1978	37.8	13.7

S-38

LOCATION.-- Lat 39°20'30", long 109°47'29", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 11, T.17 S., R.19 E., Grand County, Utah.

PERIOD OF RECORD.--April 1976 to current year.

GAGE.--None. Altitude of measuring site is 8,560 ft (2,609 m) from topographic map.

Date	Snow depth (inches)	Water content (inches)
Mar. 28, 1978	40.3	15.7

TABLE 3.--SNOW DEPTH AND WATER CONTENT--Continued

S-39

LOCATION.--Lat 39°33'10", long 109°02'11" (unsurveyed), T.6 S., R.104 W., Garfield County, Colorado.

PERIOD OF RECORD.--April 1976 to current year.

GAGE.--None. Altitude of measuring site is 8,700 ft (2,652 m) from topographic map.

Date	Snow depth (inches)	Water content (inches)
Mar. 27, 1978	47.5	15.7

S-40

LOCATION.--Lat 39°36'59", long 108°56'13", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 22, T.5 S., R.103 W., Garfield County, Colorado.

PERIOD OF RECORD.--March 1977 to current year.

GAGE.--None. Altitude of measuring site is 7,260 ft (2,213 m) from topographic map.

Date	Snow depth (inches)	Water content (inches)
Mar. 27, 1978	23.5	9.5

S-41

LOCATION.--Lat 39°41'10", long 108°53'16", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 19, T.4 S., R.102 W., Rio Blanco County, Colorado.

PERIOD OF RECORD.--April 1976 to current year.

GAGE.--None. Altitude of measuring site is 7,460 ft (2,274 m) from topographic map.

Date	Snow depth (inches)	Water content (inches)
Mar. 27, 1978	0	0

TABLE 3.--SNOW DEPTH AND WATER CONTENT--Continued

S-42

LOCATION.--Lat 39°36'01", long 108°58'16", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 28, T.5 S., R.103 W., Garfield County, Colorado.

PERIOD OF RECORD.--April 1976 to current year.

GAGE.--None. Altitude of measuring site is 7,540 ft (2,298 m) from topographic map.

Date	Snow depth (inches)	Water content (inches)
Mar. 27, 1978	30.5	12.0

S-43

LOCATION.--Lat 39°32'20", long 109°01'45" (unsurveyed), T.6 S., R.104 W., Garfield County, Colorado.

PERIOD OF RECORD.--April 1976 to current year.

GAGE.--None. Altitude of measuring site is 7,480 ft (2,280 m) from topographic map.

Date	Snow depth (inches)	Water content (inches)
Mar. 27, 1978	21.2	8.0

S-44

LOCATION.-- Lat 39°30'38", long 109°05'24", in SE $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 14, T.15 S., R.25 E., Uintah County, Utah.

PERIOD OF RECORD.--April 1976 to current year.

GAGE.--None. Altitude of measuring site is 7,160 ft (2,182 m) from topographic map.

Date	Snow depth (inches)	Water content (inches)
Mar. 27, 1978	20.7	9.0

TABLE 3.--SNOW DEPTH AND WATER CONTENT--Continued

S-45

LOCATION.--Lat 39°29'22", long 109°04'35", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 26, T.15 S., R.25 E., Uintah County, Utah.

PERIOD OF RECORD.--April 1976 to current year.

GAGE.--None. Altitude of measuring site is 8,160 ft (2,487 m) from topographic map.

Date	Snow depth (inches)	Water content (inches)
Mar. 27, 1978	25.5	10.0

S-46

LOCATION.--Lat 39°27'26", long 109°16'34", in NW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 33, T.15 $\frac{1}{2}$ S., R.24 E., Grand County, Utah.

PERIOD OF RECORD.--April 1976 to current year.

GAGE.--None. Altitude of measuring site is 8,300 ft (2,530 m) from topographic map.

Date	Snow depth (inches)	Water content (inches)
Mar. 27, 1978	15.0	6.7

S-47

LOCATION.--Lat 39°26'38", long 109°15'24", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 3, T.16 S., R.24 E., Grand County, Utah.

PERIOD OF RECORD.--April 1976 to current year.

GAGE.--None. Altitude of measuring site is 8,340 ft (2,542 m) from topographic map.

Date	Snow depth (inches)	Water content (inches)
Mar. 27, 1978	33.5	12.7

TABLE 3.--SNOW DEPTH AND WATER CONTENT--Continued

S-48

LOCATION.--Lat 39°27'32", long 109°15'08", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 34, T.15 $\frac{1}{2}$ S., R.24 E., Grand County, Utah.

PERIOD OF RECORD.--January 1975 to current year.

GAGE.--None. Altitude of measuring site is 7,740 ft (2,359 m) from topographic map.

Date	Snow depth (inches)	Water content (inches)
Dec. 13, 1977	9.0	1.8
Feb. 14, 1978	35.8	8.3
Mar. 27	29.5	13.3

S-49

LOCATION.--Lat 39°34'46", long 108°58'20", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 33, T.5 S., R.103 W., Garfield County, Colorado.

PERIOD OF RECORD.--January 1975 to current year.

GAGE.--None. Altitude of measuring site is 8,330 ft (2,539 m) from topographic map.

Date	Snow depth (inches)	Water content (inches)
Dec. 13, 1977	9.0	1.8
Feb. 14, 1978	49.3	12.5
Mar. 27	53.9	19.6

S-50

LOCATION.--Lat 39°40'14", long 108°52'45", in NW $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 30, T.4 S., R.102 W., Rio Blanco County, Colorado.

PERIOD OF RECORD.--April 1977 to current year.

GAGE.--None. Altitude of measuring site is 8,580 ft (2,615 m) from topographic map.

Date	Snow depth (inches)	Water content (inches)
Mar. 27, 1978	35.8	8.3

TABLE 4.--AIR TEMPERATURE

A-3

See P-35 in table 1 for location.

AIR TEMPERATURE (DEG. C), WATER YEAR OCTOBER 1977 to SEPTEMBER 1978

OCTOBER				NOVEMBER			DECEMBER			JANUARY			FEBRUARY			MARCH		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	10.0	-6.0	1.5	3.5	-9.5	-3.0	0	-9.0	-5.5				-	-	-	0	-5.5	-4.0
2	15.5	-1.5	7.0	8.0	-4.5	2.0	3.5	-2.0	1.0				-	-	-	0	-4.5	-3.0
3	17.5	8.5	12.0	10.5	2.0	6.5	8.5	2.5	5.0				-	-	-	0	-11.0	-7.0
4	17.5	6.5	12.0	13.0	6.0	9.0	5.0	1.0	2.5				-	-	-	0	-9.5	-6.0
5	16.0	6.5	10.5	11.5	6.0	9.0	2.5	-3.5	-1.0				-	-	-	0	-6.0	-3.5
6	11.5	4.5	8.0	9.0	1.5	4.0	3.5	-3.0	0.5				-	-	-	0	-6.5	-4.0
7	9.0	0	3.5	7.5	-0.5	3.0	5.5	0	2.5				-	-	-	2.0	-12.0	-5.0
8	9.0	-3.5	2.0	0	-12.5	-6.5	2.5	-7.5	-3.0				-	-	-	0	-11.0	-5.0
9	9.5	0.5	4.5	0	-15.0	-8.5	3.0	-2.0	1.0				-	-	-	1.0	-6.0	-3.0
10	7.5	-3.0	2.0	6.0	-7.0	-1.5	7.5	1.0	3.0				-	-	-	1.5	-7.5	-3.5
11	8.5	-6.5	0.5	7.0	-2.5	2.5	6.0	0.5	2.5				-	-	-	0	-10.5	-5.5
12	11.5	-3.5	3.5	8.5	1.5	4.0	2.5	-4.5	0				-	-	-	0	-6.5	-5.0
13	15.0	2.0	7.0	7.5	0	3.5	-	-	-				-	-	-	0	-9.0	-6.0
14	16.0	3.0	9.5	9.0	1.0	4.0	-	-	-				-	-	-	0	-13.0	-9.0
15	17.5	4.0	9.5	8.5	-1.0	2.5	-	-	-				0	-17.0	-12.5	0	-15.0	-11.0
16	16.0	4.5	9.5	8.5	1.0	4.0	-	-	-				0	-17.5	-12.0	0	-14.5	-8.0
17	18.0	3.5	10.0	7.0	1.0	3.5	-	-	-				0	-22.0	-15.5	1.5	-10.5	-4.5
18	16.5	3.5	9.5	4.5	2.0	3.5	-	-	-				0	-22.5	-14.5	3.0	-5.5	-1.5
19	17.0	5.0	10.5	3.5	-11.5	-2.0	-	-	-				0	-16.5	-10.0	3.0	-3.5	-1.0
20	13.0	4.0	8.5	0	-16.0	-12.0	-	-	-				0	-11.0	-7.0	4.5	-6.5	-1.5
21	9.5	3.0	5.5	0	-11.0	-5.5	-	-	-				0	-13.5	-8.0	5.0	-5.5	0
22	12.0	2.5	5.5	2.5	-3.5	-1.0	-	-	-				2.6	-12.5	-6.5	0.5	-4.5	-2.0
23	14.0	2.0	6.5	3.0	-4.5	-1.0	-	-	-				0	-10.0	-6.0	2.5	-4.0	-2.0
24	14.5	3.0	8.0	4.5	-3.0	0	-	-	-				0	-12.0	-6.0	0	-9.0	-3.0
25	16.5	3.0	9.5	8.5	0	4.0	-	-	-				0	-6.0	-3.5	4.0	-12.0	-4.0
26	15.5	6.5	10.0	9.5	0.5	5.5	-	-	-				0	-5.0	-3.5	6.5	-8.5	-1.0
27	14.0	6.5	10.0	2.0	-1.0	0	-	-	-				0	-8.0	-5.0	8.0	-3.0	1.5
28	12.5	6.0	9.0	2.0	-5.0	-2.0	-	-	-				0	-12.0	-7.0	8.5	-2.0	3.0
29	11.0	5.5	8.0	0	-8.0	-4.5	-	-	-				---	---	---	11.0	-4.0	4.0
30	6.0	1.0	3.5	0.5	-7.0	-3.0	-	-	-				---	---	---	7.0	-0.5	3.5
31	1.0	-4.5	-1.5	---	---	---	-	-	-				---	---	---	7.0	0	2.5
APRIL				MAY			JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	0.5	-3.0	-1.5	5.5	-3.5	0												
2	0	-3.5	-2.5	6.0	-3.5	1.0												
3	0.5	-6.0	-3.0	5.5	-1.5	1.5												
4	3.5	-3.5	0	0.5	-6.5	-3.0												
5	3.5	-4.0	-1.5	0	-9.0	-6.5												
6	3.5	-3.0	0.5	0	-8.5	-6.5												
7	5.5	0.5	3.0	0	-8.0	-4.5												
8	5.0	-2.5	0.5	2.5	-6.0	-2.5												
9	1.5	-4.5	-2.0	6.0	-6.5	0.5												
10	4.0	-6.0	-2.0	9.0	0.5	5.0												
11	6.0	-4.5	0.5	8.5	-0.5	4.5												
12	4.5	-3.5	-0.5	8.5	-5.0	1.5												
13	3.5	-3.5	0	12.0	0.5	7.0												
14	6.0	-2.0	1.5	15.0	6.0	10.5												
15	5.0	-1.0	1.5	14.5	5.5	10.0												
16	1.5	-6.5	-1.5	11.5	-4.0	5.0												
17	0	-9.5	-7.0	2.0	-6.0	-3.0												
18	2.5	-10.0	-4.0	6.0	-5.0	0												
19	6.0	-8.0	-0.5	12.0	-2.5	4.5												
20	5.5	-3.5	1.5	14.5	0.5	7.0												
21	1.0	-9.0	-3.0	9.0	1.5	4.0												
22	0	-10.5	-5.5	11.0	1.0	6.0												
23	6.5	-6.0	0	12.5	5.0	8.5												
24	10.0	-2.5	3.5	9.5	2.0	6.0												
25	8.0	3.0	5.0	10.0	1.5	5.5												
26	8.5	2.0	4.5	11.0	-0.5	6.0												
27	2.0	-3.5	-1.0	9.0	0.5	4.5												
28	4.5	-2.5	0.5	11.5	-1.0	5.0												
29	6.0	-2.5	0.5	12.0	2.0	7.5												
30	3.0	-4.0	-1.0	-	-	-												
31	---	---	---	-	-	-												

TABLE 4.--AIR TEMPERATURE--Continued

A-4

See P-37 in table 1 for location.

AIR TEMPERATURE (DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

OCTOBER				NOVEMBER			DECEMBER			JANUARY			FEBRUARY			MARCH		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.0	9.0	-0.5	0	-18.5	-8.5										-	-	-
2	15.0	-5.0	6.5	6.0	-6.0	-1.0										-	-	-
3	17.0	5.5	10.0	8.0	-4.0	2.5										-	-	-
4	16.5	3.0	9.5	9.0	0.5	4.0										-	-	-
5	16.0	5.0	9.5	7.5	-0.5	2.5										-	-	-
6	8.0	1.5	5.5	0	-5.0	-4.0										-	-	-
7	5.5	-5.0	0	-	-	-										-	-	-
8	6.0	-6.5	-1.0	-	-	-										-	-	-
9	9.0	-5.0	2.0	-	-	-										-	-	-
10	6.0	-7.5	-0.5	-	-	-										-	-	-
11	6.5	-10.0	-1.5	-	-	-										-	-	-
12	9.5	-8.5	1.0	-	-	-										-	-	-
13	14.0	-4.0	4.5	-	-	-										-	-	-
14	14.5	2.5	7.5	-	-	-										-	-	-
15	15.5	0	6.5	-	-	-										-	-	-
16	14.5	-1.5	6.0	-	-	-										-	-	-
17	16.0	0.5	8.0	-	-	-										-	-	-
18	16.0	0.5	7.0	-	-	-										-	-	-
19	15.5	0.5	7.0	-	-	-										-	-	-
20	9.0	-1.5	3.0	-	-	-										-	-	-
21	3.0	-2.5	-0.5	-	-	-										-	-	-
22	5.5	-3.5	0	-	-	-										-	-	-
23	8.5	-3.5	2.0	-	-	-										-	-	-
24	10.5	-3.5	3.0	-	-	-										-	-	-
25	12.0	-2.0	4.0	-	-	-										-	-	-
26	12.0	0	5.0	-	-	-										-	-	-
27	9.5	0	5.0	-	-	-										-	-	-
28	9.0	0	4.0	-	-	-										-	-	-
29	5.0	-5.0	1.0	-	-	-										15.0	1.5	5.5
30	2.0	-8.0	-4.0	-	-	-										10.5	1.5	5.0
31	0	-17.0	-9.5	---	---	---										10.0	0.5	4.5
APRIL				MAY			JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	4.5	-1.0	1.0	4.5	-1.5	1.0	17.5	0	9.5									
2	2.0	-3.0	-1.0	7.5	-2.5	2.5	19.5	4.0	12.0									
3	4.5	-8.5	-1.0	9.5	-0.5	3.5	-	-	-									
4	5.5	-2.5	1.5	3.0	-6.5	-1.5	-	-	-									
5	5.0	-3.5	0.5	0	-8.0	-6.5	-	-	-									
6	7.0	-1.5	2.5	2.0	-9.5	-4.0	-	-	-									
7	6.5	-2.5	3.0	4.0	-6.0	-2.5	-	-	-									
8	5.5	-3.0	0	6.5	-6.5	0.5	-	-	-									
9	1.0	-4.0	-1.5	12.0	-6.5	4.0	-	-	-									
10	5.5	-5.5	-0.5	12.5	2.0	6.5	-	-	-									
11	10.0	-5.0	3.5	12.0	1.5	6.0	-	-	-									
12	6.0	-2.0	1.5	9.0	-2.5	4.5	-	-	-									
13	6.0	-1.5	1.5	17.0	2.0	10.0	-	-	-									
14	9.5	-1.0	3.0	19.0	7.0	13.0	-	-	-									
15	6.0	-0.5	2.0	17.0	7.0	11.5	-	-	-									
16	0.5	-10.0	-2.5	13.5	-5.0	5.5	-	-	-									
17	0	-13.0	-6.5	3.5	-5.5	-2.0	-	-	-									
18	5.5	-10.0	-2.5	9.0	-6.5	3.0	-	-	-									
19	12.0	-7.0	1.0	16.0	0.5	8.0	-	-	-									
20	11.5	-3.0	3.0	18.0	5.5	11.0	-	-	-									
21	2.0	-10.0	-2.5	17.0	4.0	8.0	-	-	-									
22	3.5	-12.5	-4.0	17.5	3.0	11.5	-	-	-									
23	8.5	-6.5	1.0	17.0	5.0	11.5	-	-	-									
24	14.5	-2.0	6.0	11.5	1.5	7.0	-	-	-									
25	10.0	2.5	6.0	14.5	1.5	7.5	-	-	-									
26	9.0	3.0	5.5	19.0	1.5	8.5	-	-	-									
27	5.0	-2.0	2.0	14.5	1.5	7.0	-	-	-									
28	8.5	-2.0	3.0	13.5	1.5	7.5	-	-	-									
29	12.0	-2.0	3.0	18.5	1.0	11.0	-	-	-									
30	8.5	-1.5	2.5	16.0	-1.0	9.0	-	-	-									
31	---	---	---	12.0	-3.5	5.5	---	---	---									

TABLE 4.--AIR TEMPERATURE--Continued

A-5

See P-4 in table 1 for location.

AIR TEMPERATURE (DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975 ^{1/}

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY			FEBRUARY			MARCH		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1																		
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
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21																		
22																		
23																		
24																		
25																		
26																		
27																		
28																		
29																		
30																		
31																		
DAY	APRIL			MAY			JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	3.5	-4.0	-0.5	14.0	0	6.5	-	-	-	31.5	10.5	22.5	-	-	-	28.5	10.5	20.0
2	8.0	-4.5	-1.5	15.0	0.5	7.5	-	-	-	32.0	14.0	23.0	-	-	-	27.5	9.0	18.0
3	13.0	-4.5	1.0	17.5	2.0	10.5	-	-	-	29.0	14.5	22.5	-	-	-	28.5	8.0	17.5
4	15.0	-4.5	4.0	15.5	1.5	10.5	-	-	-	28.0	20.0	20.5	-	-	-	26.0	11.0	17.5
5	16.0	1.5	8.0	4.5	-0.5	1.0	-	-	-	28.5	13.0	21.0	-	-	-	26.5	7.5	16.5
6	11.5	1.0	6.0	4.5	0.5	2.5	-	-	-	30.0	11.0	21.5	-	-	-	27.5	9.0	18.0
7	7.5	-2.0	1.5	8.0	3.5	5.0	-	-	-	31.5	15.0	22.5	-	-	-	28.0	9.0	18.0
8	7.0	-4.5	0	15.0	4.0	9.0	-	-	-	29.0	15.0	20.5	-	-	-	20.0	12.5	16.5
9	11.0	-3.0	2.0	19.0	4.0	10.5	-	-	-	29.5	16.5	21.5	-	-	-	24.5	11.0	16.0
10	10.5	-2.5	2.5	21.5	4.5	12.5	-	-	-	27.5	15.0	21.0	-	-	-	24.0	10.5	16.0
11	8.0	-1.0	2.5	22.5	5.5	14.0	-	-	-	28.5	14.5	22.0	-	-	-	19.5	8.0	13.5
12	11.5	0	3.5	12.5	5.0	9.5	-	-	-	28.5	15.5	22.0	-	-	-	19.5	7.5	13.5
13	17.5	-2.5	5.0	20.0	5.0	12.0	-	-	-	27.5	16.5	21.0	-	-	-	18.0	9.5	14.0
14	15.0	1.0	6.5	24.0	6.5	15.0	-	-	-	28.0	13.0	20.5	-	-	-	20.5	9.0	13.0
15	15.5	0.5	7.5	26.5	8.5	17.5	-	-	-	28.0	15.0	21.0	-	-	-	23.0	6.0	14.0
16	13.5	0.5	7.0	23.0	10.5	15.5	-	-	-	22.0	13.0	16.5	-	-	-	24.5	10.0	17.0
17	9.5	1.5	5.0	20.0	8.5	13.5	-	-	-	26.0	9.0	18.5	-	-	-	25.5	10.0	16.5
18	12.5	0.5	4.0	17.5	11.0	14.0	14.0	4.5	10.0	30.0	14.5	21.5	-	-	-	23.0	6.5	14.5
19	14.0	-1.5	5.0	20.0	10.5	15.5	17.5	1.5	10.0	30.5	13.5	22.5	-	-	-	18.5	-1.5	8.5
20	19.0	1.5	8.0	-	-	-	15.0	3.5	9.0	30.5	14.5	22.0	23.0	10.5	17.0	17.5	2.5	10.0
21	20.0	1.0	8.5	-	-	-	17.0	2.5	10.5	28.5	13.5	20.0	23.0	11.5	17.5	16.5	-3.0	6.0
22	17.5	3.0	10.0	-	-	-	21.5	4.5	14.0	31.0	12.0	22.0	25.5	11.5	18.0	19.5	1.0	9.5
23	19.5	3.0	10.0	-	-	-	24.5	7.5	16.0	-	-	-	26.5	11.0	19.0	21.5	2.5	10.5
24	20.5	1.5	9.5	-	-	-	26.5	9.5	19.0	-	-	-	26.0	6.5	18.0	23.0	3.0	12.0
25	19.0	4.0	11.5	-	-	-	19.0	5.0	15.5	-	-	-	26.0	5.0	15.5	24.5	4.5	13.0
26	8.5	1.0	3.0	-	-	-	25.0	1.0	13.0	-	-	-	29.5	10.0	19.5	24.5	7.0	15.0
27	10.0	0.5	4.0	-	-	-	27.5	8.0	19.0	-	-	-	25.0	13.0	17.5	21.5	1.0	10.5
28	8.5	-0.5	2.5	-	-	-	28.0	10.0	19.5	-	-	-	26.5	9.0	18.0	22.0	3.0	11.5
29	9.5	-0.5	3.0	-	-	-	28.5	9.5	20.0	-	-	-	28.0	8.5	18.0	23.0	3.5	12.5
30	14.5	0	5.5	-	-	-	30.0	11.5	21.5	-	-	-	29.0	9.5	19.0	15.5	-2.5	6.0
31	---	---	---	-	-	-	---	---	---	-	-	-	29.0	7.5	19.5	---	---	---

^{1/} Not previously published.

TABLE 4.--AIR TEMPERATURE--Continued

A-5--Continued

AIR TEMPERATURE (DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976^{1/}

OCTOBER				NOVEMBER			DECEMBER			JANUARY			FEBRUARY			MARCH		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	20.0	1.0	9.0	10.5	-3.5	1.5	8.5	-4.0	2.0	-	-	-	7.0	-8.5	-3.5	0	-15.5	-8.5
2	22.0	2.5	11.0	13.5	-1.0	3.0	11.0	-4.5	5.0	-	-	-	7.5	-6.0	-1.5	0	-17.0	-9.0
3	24.0	4.5	13.5	14.0	-1.0	4.5	7.5	-5.0	-1.5	-	-	-	10.0	-2.5	3.5	0	-17.0	-12.0
4	24.0	7.5	14.5	14.0	-1.5	3.5	8.5	-5.0	-1.0	-	-	-	4.5	1.5	3.5	0.5	-15.0	-9.5
5	26.5	7.5	15.5	15.5	-1.0	4.0	9.0	-5.0	1.0	-	-	-	5.5	-8.5	-4.5	5.0	-13.0	-6.5
6	24.5	-6.0	15.0	16.0	-1.0	5.5	13.0	-5.0	1.5	-	-	-	0	-14.5	-9.0	10.0	-10.0	-4.0
7	18.0	2.5	11.5	17.0	0.5	7.5	12.0	-4.5	0.5	-	-	-	1.0	-10.0	-5.0	5.5	-5.5	-1.0
8	10.5	-2.5	3.5	8.5	-1.5	4.0	10.5	-4.0	-0.5	-	-	-	5.5	-2.0	1.5	4.0	-11.0	-4.5
9	17.0	-3.0	5.5	5.5	-5.0	-2.5	7.0	-5.0	-1.5	-	-	-	7.5	-1.0	3.0	6.5	-12.0	-5.5
10	21.0	-0.5	11.0	9.0	-5.0	1.0	8.5	-5.0	-1.0	-	-	-	6.0	-6.0	-1.5	9.5	-6.5	1.0
11	21.0	3.0	13.0	1.5	-5.0	-3.5	9.0	-2.0	1.5	-	-	-	8.0	-8.0	-1.5	-	-	-
12	20.0	3.0	12.5	3.0	-5.0	-3.5	7.0	0.5	3.5	-	-	-	7.5	-4.0	1.0	-	-	-
13	9.5	-2.5	3.0	5.5	-5.0	-2.5	4.0	-3.5	0	-	-	-	7.0	-3.0	1.0	-	-	-
14	12.0	-4.0	3.0	9.5	-5.0	-1.0	0	-5.0	-3.0	-	-	-	4.5	-6.5	-2.0	-	-	-
15	15.5	-4.5	4.5	11.0	-5.0	0	0	-5.0	-5.0	-	-	-	3.0	-8.5	-4.0	-	-	-
16	16.0	-0.5	6.0	13.0	-5.0	2.0	2.0	-5.0	-4.0	-	-	-	3.0	-5.0	-1.5	11.0	-5.0	3.0
17	19.0	1.0	8.0	13.5	-5.0	0.5	1.0	-5.0	-4.0	-	-	-	-	-	-	13.5	-0.5	5.5
18	22.0	-1.5	9.0	6.5	-5.0	-0.5	-	-	-	-	-	-	-	-	-	14.5	1.0	6.5
19	19.5	1.0	8.0	0	-5.0	-3.0	-	-	-	-	-	-	8.0	-5.5	-2.0	2.0	-6.0	-3.0
20	19.0	1.5	7.5	2.0	-5.0	-4.0	-	-	-	-	-	-	0	-15.5	-7.0	7.0	-6.0	0
21	22.0	0	10.0	0	-5.0	-4.0	-	-	-	-	-	-	2.0	-14.0	-9.0	13.5	-3.5	3.0
22	20.0	1.0	9.5	4.0	-5.0	-3.0	-	-	-	2.0	-16.0	-9.0	4.5	-11.0	-5.0	13.5	-2.0	2.5
23	0.5	-3.5	-1.5	6.0	-5.0	-2.0	-	-	-	1.0	-15.0	-7.0	6.5	-5.5	-1.0	-	-	-
24	2.0	-5.0	-3.5	9.5	-5.0	0.5	-	-	-	4.0	-7.0	-3.0	8.5	-5.5	-1.5	-	-	-
25	4.5	-5.0	-1.0	3.5	-5.0	-3.0	-	-	-	0	-17.0	-9.0	11.5	-2.5	3.0	-	-	-
26	12.5	-3.0	5.5	0	-5.0	-4.5	-	-	-	1.5	-16.5	-8.0	11.5	-2.5	3.5	-	-	-
27	11.5	-2.5	3.0	2.5	-5.0	-1.5	-	-	-	6.0	-10.0	-6.0	13.0	-1.0	5.0	-	-	-
28	11.0	-3.5	1.0	1.5	-4.5	-2.0	-	-	-	4.5	-8.5	-5.0	9.5	4.0	4.5	-	-	-
29	15.5	-4.5	3.0	0	-5.0	-5.0	-	-	-	5.5	-10.0	-4.5	0	-16.0	-7.5	-	-	-
30	16.5	-4.5	4.5	0	-5.0	4.0	-	-	-	9.5	-10.0	-3.0	---	---	---	-	-	-
31	8.5	-3.5	4.5	---	---	---	-	-	-	5.0	-8.5	-5.0	---	---	---	-	-	-
APRIL				MAY			JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1																		
2																		
3																		
4																		
5																		
6																		
7																		
8																		
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^{1/} Not previously published.

A-6

AIR TEMPERATURE (DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

33

TABLE 4.--AIR TEMPERATURE--Continued

A-7

See P-7 in table 1 for location.

AIR TEMPERATURE (DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

OCTOBER				NOVEMBER			DECEMBER			JANUARY			FEBRUARY			MARCH		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	-	-	-	13.0	3.0	8.5	-	-	-	-	-	-	0.5	-6.0	-3.0	3.0	0.5	2.0
2	-	-	-	8.0	1.5	3.0	-	-	-	-	-	-	0	-4.0	-2.5	5.0	0.5	2.5
3	-	-	-	7.5	-0.5	3.5	-	-	-	0	-6.5	-3.0	1.5	-6.5	-3.0	0	-6.0	-3.0
4	-	--	-	0	-11.0	-4.5	-	-	-	0	-2.0	-1.0	6.0	-7.5	-2.5	2.5	-9.0	-1.0
5	-	-	-	-	-	-	-	-	-	1.5	-1.0	0	4.5	3.5	0.5	3.5	0	1.5
6	-	-	-	-	-	-	-	-	-	1.0	-12.0	-3.0	2.5	-2.5	0.5	4.5	-0.5	1.5
7	-	-	-	-	-	-	-	-	-	0	-14.0	-9.0	0.5	-3.5	-1.5	7.0	-4.0	0.5
8	-	-	-	-	-	-	-	-	-	1.0	-10.0	-5.5	0.5	-9.5	-2.5	7.0	-5.0	0.5
9	-	-	-	-	-	-	-	-	-	2.5	-6.5	-2.0	0	-9.5	-3.0	8.0	-2.5	2.5
10	-	-	-	-	-	-	-	-	-	1.0	-1.5	0	2.5	-0.5	1.5	7.5	-4.0	1.0
11	-	-	-	-	-	-	-	-	-	2.5	-5.0	-0.5	1.0	-7.0	-1.5	4.5	-3.5	0.5
12	-	-	-	-	-	-	-	-	-	-	-	-	0	-12.5	-5.5	3.0	-3.5	0.5
13	-	-	-	-	-	-	-	-	-	-	-	-	0	-12.5	-5.0	3.0	-10.0	-2.5
14	-	-	-	-	-	-	5.0	-11.0	0	1.0	-8.0	-2.5	1.5	-12.0	-4.0	1.0	-8.0	-3.0
15	-	-	-	-	-	-	6.5	-3.5	1.5	1.0	-1.0	0	0	-12.5	-8.0	1.5	-13.0	-5.0
16	-	-	-	-	-	-	0	-16.5	-8.0	1.0	-11.0	-3.0	0	-15.5	-7.5	6.5	-12.0	-3.0
17	-	-	-	-	-	-	0	-14.5	-5.5	2.5	-6.0	-1.0	0	-19.5	-12.5	10.0	-5.5	1.0
18	-	-	-	-	-	-	0	-17.5	-5.0	2.0	-13.5	-5.5	-	-	-	11.5	-3.0	3.5
19	-	-	-	-	-	-	-	-	-	0	-8.0	-3.0	0	-14.0	-6.5	10.5	-0.5	4.0
20	13.5	4.5	8.0	-	-	-	0	-24.0	-15.0	0	-5.0	-2.5	3.0	-9.5	-2.5	10.0	-1.0	3.5
21	11.5	-3.0	4.0	-	-	-	0	-15.5	-8.5	1	-9.0	-3.5	4.0	-11.5	-5.0	10.5	-1.0	4.5
22	13.0	-3.5	3.0	-	-	-	0	-10.5	-5.0	0	-9.5	-4.0	6.0	-8.5	-3.0	5.0	1.0	3.0
23	16.0	-0.5	9.5	-	-	-	1	-8.5	-4.0	0	-8.0	-4.5	5.5	-7.5	-2.5	7.0	0.5	3.0
24	15.5	1.5	7.5	-	-	-	2.5	-10.5	-5.5	0	-12.0	-8.5	5.5	-7.0	-2.0	6.5	-4.0	2.5
25	13.5	1.5	8.0	-	-	-	-1.0	-14.0	-8.0	0	-13.0	-8.5	6.0	-3.5	1.0	9.0	-8.0	1.0
26	13.0	1.0	5.5	-	-	-	0.5	-12.5	-7.5	0	-8.5	-4.5	5.5	0	3.0	11.5	-3.0	3.0
27	2.5	-5.0	-1.5	-	-	-	0	-5.0	-3.0	1.0	-15.0	-8.5	4.0	-2.0	1.5	13.0	-0.5	5.5
28	3.0	-8.5	-2.5	-	-	-	1.5	-2.5	-0.5	2.0	-9.0	-5.0	2.0	-9.5	-1.5	14.0	0	6.0
29	8.5	-4.5	0	-	-	-	2.0	-1.0	0	2.5	-7.5	-3.5	---	---	---	14.5	-4.0	5.5
30	12.0	-0.5	4.5	-	-	-	1.5	-1.5	0	4.0	-9.0	-4.0	---	---	---	13.5	1.5	7.0
31	14.0	3.0	7.5	---	---	---	0	-16.0	-8.5	3.0	-5.0	-1.5	---	---	---	13.5	2.0	7.0
APRIL				MAY			JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	6.5	2.0	4.0	11.5	-0.5	4.5	18.5	-3.0	9.0	25.5	7.5	16.0	24.0	10.5	16.5	24.5	8.0	16.0
2	6.5	2.0	4.0	12.5	0	5.5	19.0	-0.5	11.0	25.5	7.0	16.5	27.0	7.0	17.0	26.0	8.5	16.5
3	8.0	0	3.0	13.5	1	7.5	18.0	0	10.5	24.5	6.5	16.5	25.5	4.5	15.5	26.5	8.5	17.0
4	10.5	-0.5	5.5	8.0	0.5	4.0	15.5	4.0	10.0	23.0	4.5	14.0	26.5	5.5	16.5	27.0	9.5	17.0
5	8.5	1.5	4.5	3.0	-2.5	0	12.5	0	6.5	24.5	3.0	15.0	28.5	8.5	18.0	27.0	10.5	17.5
6	11.5	3.0	6.5	3.5	-1.5	0.5	20.0	-0.5	10.5	23.5	3.0	14.5	28.5	8.5	18.5	26.0	9.5	17.0
7	14.0	2.0	9.0	6.0	-3.0	1.5	20.5	2.5	12.5	26.0	5.5	16.5	27.5	7.0	17.5	22.5	11.0	16.5
8	12.0	3.0	7.0	9.5	-4.0	2.5	21.5	4.0	13.5	26.0	7.0	17.0	28.5	9.0	18.5	21.5	7.5	14.0
9	7.5	-3.5	3.5	13.0	-2.5	5.5	24.5	6.0	15.5	26.5	10.0	18.0	27.0	11.0	18.0	23.5	7.5	15.0
10	9.0	-5.5	2.5	6.0	2.0	9.5	22.5	9.0	17.0	26.0	10.0	17.5	27.0	10.0	18.5	22.0	8.0	15.5
11	15.0	-1.5	6.5	16.0	2.0	10.0	21.0	2.5	13.5	22.0	11.0	16.5	26.5	13.0	18.0	16.5	4.0	9.5
12	13.0	-4.0	4.5	16.0	2.0	8.0	24.5	1.5	14.0	26.0	8.5	17.0	24.0	11.5	18.0	13.5	-4.0	6.0
13	10.0	0	4.5	20.0	1.5	11.0	24.5	7.0	15.5	28.0	8.0	18.5	20.0	7.5	14.5	16.5	-4.0	6.0
14	13.0	-0.5	6.5	22.5	6.0	14.0	23.5	7.0	15.5	30.5	7.5	19.5	15.5	4.5	9.5	17.0	2.0	10.0
15	12.5	1.0	6.0	21.0	5.0	14.5	23.5	5.5	15.5	24.5	11.0	19.0	20.0	0.5	9.5	18.5	3.5	10.5
16	9.5	0	5.0	17.0	2.0	10.0	23.5	5.5	15.0	26.0	11.5	18.0	23.0	6.0	15.0	20.0	9.0	13.5
17	4.0	-5.0	-0.5	7.0	-1.5	3.0	20.5	2.5	12.5	24.0	10.5	17.5	23.0	8.5	16.0	17.5	2.0	10.5
18	10.0	-8.0	1.0	13.0	-3.0	4.5	24.0	2.0	15.0	24.5	8.0	16.0	17.5	2.0	9.5	9.0	-0.5	3.5
19	12.5	-4.5	4.0	18.5	-3.5	8.5	22.0	4.0	15.0	26.5	11.0	17.5	22.5	2.0	12.0	5.0	-2.5	1.0
20	14.0	-1.5	6.0	20.0	-1.5	11.0	23.5	0.5	13.5	27.5	11.0	19.0	22.5	8.0	15.0	9.5	-5.0	1.0
21	8.0	-5.5	4.0	15.5	5.5	9.5	26.5	7.0	17.0	24.5	6.5	17.0	24.5	8.5	17.0	15.0	0	6.5
22	6.5	-10.0	-0.5	18.0	3.0	10.5	26.0	6.0	17.0	26.0	3.0	15.0	22.0	11.5	16.0	18.5	3.5	10.0
23	13.5	-4.5	5.0	19.0	5.5	12.0	26.0	8.5	18.5	27.5	6.0	16.5	24.0	8.0	15.0	22.5	2.0	11.0
24	16.0	-3.5	7.5	16.0	4.5	11.5	25.5	12.0	20.0	27.5	9.0	18.0	24.5	8.0	15.5	20.5	5.0	13.0
25	16.0	4.5	10.0	16.5	1.5	9.0	23.0	7.5	16.5	26.5	10.0	18.0	24.0	8.0	15.5	21.0	3.5	11.0
26	16.5	4.5	10.5	17.0	0.5	8.5	23.5	0.5	13.5	29.5	6.5	19.0	24.0	6.5	15.0	22.0	3.5	13.5
27	7.5	0	3.5	15.0	1.0	8.5	24.5	7.0	16.0	29.5	10.0	20.0	24.0	5.0	14.5	22.0	4.0	12.5
28	11.0	-1.0	5.5	17.0	0	9.0	21.0	9.5	15.5	28.0	12.0	19.5	23.5	2.5	13.5	22.0	4.0	13.0
29	12.0	-0.5	5.0	18.5	0.5	11.5	21.0	8.5	14.5	26.0	10.0	19.0	23.5	3.0	13.0	20.5	0.5	10.0
30	9.0	1.5	5.0	18.5	0	11.0	23.5	7.0	15.0	27.5	8.0	18.5	23.5	5.0	14.0	21.0	0	10.0
31	---	---	---	16.0	0	8.0	---	---	---	26.0	11.0	17.5	23.5	9.5	16.0	---	---	---

TABLE 5.—STREAM DISCHARGE AND WATER-QUALITY DATA AT CONTINUOUS-RECORD STATIONS

09306395 WHITE RIVER NEAR COLORADO-UTAH STATE LINE, UTAH

LOCATION.—Lat 40°00'50", long 109°04'48", in NW1/4NE1/4NE1/4 sec.27, T.9 S., R.25 E., Uintah County, Hydrologic Unit 14050007, on right bank 900 ft (270 m) upstream from small right bank tributary, 2.7 mi (4.3 km) downstream from Colorado-Utah State Line, and 7.5 mi (12.1 km) upstream from Evacuation Creek.

DRAINAGE AREA.—3,680 mi² (9,530 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1976 to current year.

GAGE.—Water-stage recorder. Altitude of gage is 5,030 ft (1,533 m) from topographic map.

REMARKS.—Water-discharge records good except those for winter periods, which are fair. Diversions for irrigation of about 31,900 acres (129 km²) above station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 4,000 ft³/s (113 m³/s) June 17, 18, 1978, gage height, 7.00 ft (2.134 m); maximum gage height, 7.07 ft (2.155 m) Sept. 8, 1978; minimum, 10 ft³/s (0.28 m³/s) July 2, 3, 4, 1977.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 4,000 ft³/s (113 m³/s) June 17, 18, gage height, 7.00 ft (2.134 m); maximum gage height, 7.07 ft (2.155 m) Sept. 8; minimum daily discharge, 100 ft³/s (2.83 m³/s) Dec. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	187	330	311	320	320	369	547	901	2180	2340	450	252
2	173	318	328	300	320	361	674	865	1980	2220	460	255
3	189	306	311	261	320	356	739	814	2050	2020	450	257
4	178	318	315	214	320	349	660	933	2080	1880	430	252
5	169	310	333	236	320	361	598	1040	2210	1700	410	236
6	193	310	328	300	310	384	616	1010	2370	1510	410	215
7	427	414	303	330	310	448	576	933	2140	1370	400	198
8	330	356	259	320	310	456	530	873	2250	1280	390	1630
9	290	345	291	300	340	485	556	929	2220	1180	380	585
10	267	302	295	280	330	487	594	759	2400	1080	370	419
11	252	275	259	290	290	506	582	782	2850	1060	370	355
12	259	290	305	340	320	435	534	814	3330	1140	370	345
13	259	315	305	340	340	415	544	803	3410	1070	392	383
14	290	310	305	340	340	404	583	843	3330	978	452	360
15	278	300	305	280	340	398	588	1100	3530	911	449	343
16	286	305	305	305	320	372	599	1640	3650	851	522	356
17	302	305	305	305	300	352	614	2100	3790	830	465	357
18	294	305	303	305	280	361	620	2430	3850	888	424	369
19	286	300	190	305	260	435	581	1860	3620	965	415	408
20	286	275	190	305	220	507	540	1520	3410	865	440	439
21	298	220	140	305	280	607	531	1520	3210	809	434	430
22	306	125	100	305	290	576	548	1750	2940	756	415	425
23	322	210	150	305	290	680	558	1900	2880	700	389	411
24	306	356	170	305	280	761	539	2210	3000	660	363	403
25	298	370	330	305	280	929	519	2640	3120	650	343	386
26	294	380	320	320	301	552	574	2580	3300	600	351	387
27	294	395	310	320	345	473	648	2240	3110	550	335	385
28	294	375	310	320	362	462	871	2280	2690	500	324	368
29	290	356	310	300	---	463	884	2040	2600	480	325	375
30	306	342	325	260	---	475	911	1980	2510	470	307	371
31	326	---	330	320	---	489	---	2120	---	460	265	---
TOTAL	8529	9418	8641	9341	8638	14708	18458	46109	86010	32773	12300	11955
MEAN	275	314	279	301	309	474	615	1487	2867	1057	397	399
MAX	427	414	333	340	362	929	911	2640	3850	2340	522	1630
MIN	169	125	100	214	220	349	519	759	1980	460	265	198
AC-FT	16920	18680	17140	18530	17130	29170	36610	91460	170600	65010	24400	23710
WTR YR 1978	TOTAL	266880	MEAN	731	MAX	3850	MIN	100	AC-FT	529400		

09306395 WHITE RIVER NEAR COLORADO-UTAH STATE LINE,
UTAH—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—October 1976 to current year.

PERIOD OF DAILY RECORD.—

SPECIFIC CONDUCTANCE: October 1976 to current year.

WATER TEMPERATURES: October 1976 to current year.

SUSPENDED-SEDIMENT DISCHARGE: October 1976 to current year.

REMARKS.—Specific conductance and water-temperature recorders were not operated during the winter period. Sediment loads computed based on U.S. P.S. 69 pumping sediment sampler concentrations for days where concentrations are given. All other days computed using sediment-rating curves.

EXTREMES FOR PERIOD OF RECORD.—

SPECIFIC CONDUCTANCE: Maximum recorded (more than 20 percent missing record), 1,570 micromhos July 22, 1977; minimum recorded, 276 micromhos June 27, 1978.

WATER TEMPERATURES: Maximum recorded (more than 20 percent missing record), 31.0°C Aug. 9, 1978; minimum, 0.0°C on many days during winter periods.

SEDIMENT LOADS: Maximum daily, 412,000 tons (374,000 tonnes) Sept. 8, 1978; minimum daily, 1.0 ton (0.91 tonne) July 2, 3, 1977.

EXTREMES FOR CURRENT YEAR.—

SPECIFIC CONDUCTANCE: Maximum recorded (more than 20 percent missing record), 1,070 micromhos Mar. 24; minimum recorded, 276 micromhos, June 27.

WATER TEMPERATURES: Maximum recorded (more than 20 percent missing record), 31.0°C Aug. 9; minimum, 0.0°C on many days during winter period.

SEDIMENT LOADS: Maximum daily, 412,000 tons (374,000 tonnes) Sept. 8; minimum daily, 24 tons (22 tonnes) Dec. 22.

WATER QUALITY DATA. WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT											
06...	1045	166	14.5	1000	8.2	7.8	17	360	150	76	40
NOV											
09...	1530	330	5.0	800	--	--	--	--	--	--	--
DEC											
07...	1150	300	1.0	850	--	--	--	--	--	--	--
JAN											
04...	1350	214	.0	740	8.1	--	48	320	130	80	28
FEB											
22...	1205	290	.0	950	--	--	--	--	--	--	--
MAR											
16...	1100	360	4.5	980	--	--	--	--	--	--	--
APR											
26...	1300	567	13.0	700	--	7.8	36	250	86	66	21
JUN											
14...	1035	3520	15.0	320	--	--	--	--	--	--	--
30...	1045	2720	17.0	290	--	--	--	--	--	--	--
JUL											
14...	1300	1030	20.0	490	8.2	7.6	42	220	76	58	17
AUG											
22...	1330	413	21.0	710	--	--	--	--	--	--	--
SEP											
04...	1155	252	22.0	680	7.8	8.3	8	270	100	64	26

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AO- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
OCT											
06...	94	36	2.2	2.4	250	0	210	2.5	--	250	60
NOV											
09...	--	--	--	--	--	--	--	--	--	--	--
DEC											
07...	--	--	--	--	--	--	--	--	--	--	--
JAN											
04...	75	34	1.8	2.0	230	0	190	2.9	--	200	45
FEB											
22...	--	--	--	--	--	--	--	--	--	--	--
MAR											
16...	--	--	--	--	--	--	--	--	--	--	--
APR											
26...	48	29	1.3	1.8	200	--	160	--	.0	140	29
JUN											
14...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
JUL											
14...	23	19	.7	1.7	170	--	140	--	--	88	15
AUG											
22...	--	--	--	--	--	--	--	--	--	--	--
SEP											
04...	52	30	1.4	1.9	200	0	160	5.1	.1	160	38

E ESTIMATED.

TABLE 5.—Continued

09306395 WHITE RIVER NEAR COLORADO-UTAH STATE LINE, UTAH—Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	BROMIDE DIS- SOLVED (MG/L AS BR)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C. DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TOMS PER AC-FT)	SOLIDS, DIS- SOLVED (TOMS PER DAY)	SOLIDS, RESIDUE AT 105 DEG. C. SUS- PENDED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3)
OCT											
06...	.4	.2	13	650	730	661	.88	291	91	.01	.04
NOV											
09...	--	--	--	--	--	--	--	--	--	--	--
DEC											
07...	--	--	--	--	--	--	--	--	--	--	--
JAN											
04...	.2	--	15	571	--	560	.78	330	--	.07	.31
FEB											
22...	--	--	--	--	--	--	--	--	--	--	--
MAR											
16...	--	--	--	--	--	--	--	--	--	--	--
APR											
26...	.2	.1	12	427	440	418	.58	654	380	.06	.27
JUN											
14...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
JUL											
14...	.2	--	17	297	--	305	.40	826	--	.03	.13
AUG											
22...	--	--	--	--	--	--	--	--	--	--	--
SEP											
04...	.2	.1	12	461	--	454	.63	314	26	.01	.04

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS TOTAL (MG/L AS PO4)	PHOS- PHORUS, DRTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, DRTHO, DIS- SOLVED (MG/L AS PO4)
OCT										
06...	.00	.00	.01	.01	.01	.53	.08	.25	.00	.00
NOV										
09...	--	--	--	--	--	--	--	--	--	--
DEC										
07...	--	--	--	--	--	--	--	--	--	--
JAN										
04...	.01	.03	.08	.06	.08	.44	.10	--	.07	.21
FEB										
22...	--	--	--	--	--	--	--	--	--	--
MAR										
16...	--	--	--	--	--	--	--	--	--	--
APR										
26...	.00	.00	.06	.00	.00	.86	.36	1.1	.01	.03
JUN										
14...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
JUL										
14...	.00	.00	.03	.03	.04	.58	.15	--	.03	.09
AUG										
22...	--	--	--	--	--	--	--	--	--	--
SEP										
04...	.00	.00	.01	.02	.03	.63	.04	.12	.01	.03

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)
OCT									
06...	1045	20	2	0	90	0	0	2	10
JAN									
04...	1350	20	--	--	60	--	--	--	50
APR									
26...	1300	0	1	0	50	0	0	2	50
JUL									
14...	1300	--	--	--	40	--	--	--	--
SEP									
04...	1155	30	2	100	60	0	0	5	20

TABLE 5.—Continued

09306395 WHITE RIVER NEAR COLORADO-UTAH STATE LINE, UTAH—Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 06...	0	30	20	.0	1	1	1100	2.0	4
JAN 04...	--	8	10	--	--	--	1100	--	--
APR 26...	0	8	10	.0	0	1	770	2.0	10
JUL 14...	--	10	20	--	--	--	500	--	--
SEP 04...	3	20	0	.0	2	1	800	.7	10

DATE	TIME	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP., TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP., TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS YT-90)	GROSS BETA, SUSP., TOTAL (PCI/L AS YT-90)
OCT 06...	1045	<6.9	5.2	2.0	4.1	1.8	3.8
APR 26...	1300	<4.3	27	1.9	13	1.7	12
SEP 04...	1155	<3.7	1.1	<2.3	1.4	<2.2	1.4

DATE	TIME	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)	CARBON, INOR- GANIC, TOTAL (MG/L AS C)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT 06...	1045	--	--	53	1	.10
JAN 04...	1350	--	--	.0	--	--
APR 26...	1300	3.0	2.4	32	8	.00
SEP 04...	1155	4.3	1.1	40	3	.00

TABLE 5.--CONTINUED

09306395 WHITE RIVER NEAR UTAH-COLORADO STATE LINE, UTAH--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA

WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

BENTHIC INVERTEBRATES

DIVISIONS: .CLASS		DIVERSITY INDEX = 2.48		
..ORDER				
...FAMILY				
....GENUS				
.....SPECIES				
DATE	ORGANISM	COMMON NAME	ORGANISM COUNT	SAMPLING METHOD
MAY 25	.INSECTA			4 SURBER SAMPLES (4 FT ² TOTAL)
	..EPHEMEROPTERA	MAYFLIES		
	...BAETIDAE			
	....BAETIS		1
	..PLECOPTERA	STONEFLIES		
	...PERLODIDAE			
	....ISOPERLA		
	....MORMONA		14
	..COLEOPTERA			
	...ELMIDAE	RIFFLE BEETLES		
	....OPTIOSERVUS		5
	..TRICHOPTERA	CADDISFLIES		
	...HYDROPSYCHIDAE			
	....HYDROPSYCHE		2
	...BRACHYCENTRIDAE			
	....BRACHYCENTRUS		
	.....AMERICANUS		1
	..DIPTERA			
	...TIPULIDAE	CRANE FLIES		
	....HEXATOMA		1
	...SIMULIIDAE	BLACK FLIES		
	....SIMULIUM		1
	...CHIRONOMIDAE	MIDGES		
	....EUKIEFFERIELLA		1
	...CERATOPOGONIDAE			
	....BEZZIA		2
	...STRATIOMYIDIA			
	....EUPARYPHUS		1
	TOTAL		29	

TABLE 5.--CONTINUED

09306395 WHITE RIVER NEAR UTAH-COLORADO STATE LINE, UTAH--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA

WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

BENTHIC INVERTEBRATES

DIVISIONS: .CLASS		DIVERSITY INDEX = 2.58		
..ORDER				
...FAMILY				
....GENUS				
.....SPECIES				
DATE	ORGANISM	COMMON NAME	ORGANISM COUNT	SAMPLING METHOD
JULY 25	.INSECTA			4 SURBER SAMPLES (4 FT ² TOTALS)
	..EPHEMEROPTERA	MAYFLIES		
	...SIPHONURIDAE			
	....ISONYCHIA		1	
	...HEPTAGENIIDAE			
	....HEPTAGENIA		1	
	...BAETIDAE			
	....BAETIS		2	
	...TRICORYTHIDAE			
	....TRICORYTHODES		1	
	..HEMIPTERA			
	...CORIXIDAE	WATER BOATMEN		
	....CORISELLA			
	.....TARSALIS		1	
	...VELIIDAE	WATER STRIDERS		
	....RHAGOVELIA		11	
	..TRICHOPTERA	CADDISFLIES		
	...HYDROPSYCHIDAE			
	....HYDROPSYCHE			
	...LEPTOCERIDAE			
	....NECTOPSYCHE			
	.....MINUTA		1	
	..DIPTERA			
	...SIMULIIDAE	BLACK FLIES		
	....SIMULIUM		4	
	...CHIRONOMIDAE	MIDGES		
	....ABLABESMYIA		1	
	TOTAL		24	

TABLE 5.—Continued

09306395 WHITE RIVER NEAR COLORADO-UTAH STATE LINE, UTAH—Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	698	686	692						
2	---	---	---	691	677	684						
3	---	---	---	677	650	657						
4	---	---	---	659	635	646						
5	---	---	---	646	638	643						
6	---	---	---	635	623	629						
7	802	594	673	706	592	638						
8	722	646	689	627	615	619						
9	733	679	704	---	---	---						
10	715	689	708	---	---	---						
11	716	696	704	---	---	---						
12	722	708	713	---	---	---						
13	731	719	726	---	---	---						
14	737	719	729	---	---	---						
15	742	728	735	---	---	---						
16	758	732	743	---	---	---						
17	779	765	770	---	---	---						
18	795	783	788	---	---	---						
19	802	744	771	---	---	---						
20	752	738	744	---	---	---						
21	759	735	747	---	---	---						
22	799	739	755	---	---	---						
23	766	732	743	---	---	---						
24	746	730	739	---	---	---						
25	759	727	743	---	---	---						
26	759	735	746	---	---	---						
27	774	750	758	---	---	---						
28	788	762	773	---	---	---						
29	777	743	752	---	---	---						
30	822	718	753	---	---	---						
31	751	709	723	---	---	---						
MONTH	822	594	737	706	592	651						

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1				---	---	---	---	---	---	623	581	595
2				---	---	---	837	673	791	607	587	598
3				---	---	---	821	737	770	624	598	608
4				---	---	---	790	708	752	624	574	600
5				---	---	---	795	597	731	574	539	552
6				---	---	---	815	599	732	563	539	547
7				---	---	---	800	572	661	606	538	583
8				---	---	---	703	613	645	618	558	597
9				---	---	---	693	599	645	613	491	574
10				---	---	---	650	580	619	625	459	533
11				---	---	---	644	550	594	642	456	539
12				---	---	---	589	545	571	603	479	543
13				---	---	---	618	588	600	597	503	557
14				---	---	---	612	566	592	586	500	551
15				---	---	---	603	543	556	584	482	548
16				994	968	984	568	550	560	561	457	514
17				1000	967	981	566	532	548	487	383	389
18				999	955	978	541	499	523	436	360	392
19				994	882	960	528	508	519	444	382	419
20				947	851	902	630	510	543	471	383	424
21				929	831	885	669	627	649	433	335	381
22				936	858	890	705	655	680	436	330	381
23				952	854	905	706	674	691	418	318	377
24				1070	849	914	699	675	689	351	311	326
25				946	696	849	707	657	690	365	317	333
26				760	692	713	716	698	708	380	282	333
27				915	761	790	717	665	689	---	---	---
28				---	---	---	687	593	640	---	---	---
29				---	---	---	594	556	567	---	---	---
30				---	---	---	650	566	584	---	---	---
31				---	---	---	---	---	---	---	---	---
MONTH				1070	692	896	837	499	639	642	282	492

TABLE 5.—Continued

09306395 WHITE RIVER NEAR COLORADO-UTAH STATE LINE, UTAH—Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	329	291	307	356	302	336	577	571	573	676	658	667
2	336	302	317	376	306	347	587	573	579	682	668	675
3	338	306	320	392	356	377	599	581	586	690	680	685
4	349	301	326	410	330	392	590	582	587	696	680	688
5	364	292	327	430	374	420	596	584	588	715	695	705
6	466	316	356	454	332	406	607	591	597	727	717	722
7	343	305	328	496	362	444	607	595	601	754	744	747
8	405	333	356	520	400	428	607	597	602	935	765	809
9	374	326	350	454	384	408	614	606	609	816	768	782
10	353	317	334	420	410	415	798	614	672	786	770	777
11	353	325	338	436	430	433	672	556	639	797	791	794
12	360	334	347	602	452	491	677	665	671	820	790	810
13	339	325	333	502	470	482	690	678	683	790	751	771
14	332	320	324	498	484	491	773	683	707	760	716	740
15	330	314	323	498	490	495	750	690	717	716	685	698
16	323	313	319	507	499	504	735	711	723	691	671	683
17	326	304	316	515	507	511	719	683	698	688	666	674
18	317	297	305	523	513	519	690	680	687	666	633	645
19	310	298	304	526	520	521	697	687	693	700	638	657
20	313	293	302	522	510	516	704	692	699	652	618	636
21	309	293	300	527	517	522	709	697	706	642	622	632
22	312	294	303	533	527	529	710	678	695	644	632	636
23	307	287	296	537	527	532	684	658	666	659	643	650
24	298	282	290	538	530	534	670	656	663	667	651	658
25	293	281	287	540	532	535	674	646	659	667	647	657
26	296	278	286	538	528	533	667	643	654	671	651	661
27	294	276	283	549	535	541	663	649	656	680	650	666
28	295	287	291	555	545	549	671	651	660	672	644	656
29	302	288	295	564	554	558	671	649	659	658	630	641
30	326	290	318	572	560	564	671	647	658	656	628	640
31	---	---	---	574	566	570	665	651	658	---	---	---
MONTH	466	276	316	602	302	481	798	556	653	935	618	695
YEAR	1070	276	591									

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	14.5	9.0	11.5	7.0	4.0	5.5	.5	.0	.5			
2	14.0	8.5	11.5	7.0	3.5	5.0	1.0	.0	.5			
3	15.5	10.0	12.5	7.0	3.5	5.5	2.5	.0	1.5			
4	15.5	10.5	13.0	8.5	4.5	6.5	3.5	2.5	3.0			
5	17.0	13.0	14.5	8.0	6.0	7.5	3.5	2.0	2.5			
6	16.5	13.0	15.5	8.0	6.5	7.0	2.5	1.0	2.0			
7	14.5	12.0	13.0	8.5	6.0	7.5	---	.5	---			
8	13.0	9.0	11.0	7.5	5.5	6.5	---	---	---			
9	12.5	8.5	10.5	6.0	2.5	4.0	---	---	---			
10	11.5	8.5	10.0	4.0	1.0	2.5	---	---	---			
11	11.0	6.5	8.5	3.5	1.0	2.5	---	---	---			
12	10.5	6.0	8.5	4.5	1.5	3.0	---	---	---			
13	11.0	6.5	9.0	4.5	1.5	3.0	---	---	---			
14	11.5	7.0	9.5	4.5	1.5	3.5	---	---	---			
15	12.5	7.5	10.0	5.0	2.5	4.0	---	---	---			
16	12.5	8.0	10.5	5.5	2.5	4.0	---	---	---			
17	12.5	8.0	10.5	5.5	3.0	4.5	---	---	---			
18	12.5	8.0	10.5	5.5	4.0	4.5	---	---	---			
19	12.0	8.0	10.0	4.5	.0	2.5	---	---	---			
20	12.0	9.0	10.5	.0	.0	.0	---	---	---			
21	12.5	10.0	11.0	.0	.0	.0	---	---	---			
22	12.0	8.5	10.5	.0	.0	.0	---	---	---			
23	11.5	8.0	9.5	.0	.0	.0	---	---	---			
24	10.0	7.0	8.5	.0	.0	.0	---	---	---			
25	10.5	6.5	8.5	.0	.0	.0	---	---	---			
26	10.5	6.5	8.5	1.0	.0	.5	---	---	---			
27	10.5	6.5	9.0	1.0	.0	.5	---	---	---			
28	11.0	7.5	9.5	2.0	.0	.5	---	---	---			
29	10.0	8.0	9.0	1.0	.0	.5	---	---	---			
30	10.5	8.0	9.0	1.0	.0	.5	---	---	---			
31	8.5	6.0	7.0	---	---	---	---	---	---			
MONTH	17.0	6.0	10.5	8.5	.0	3.0	3.5	.0	1.5			

TABLE 5.—Continued

09306395 WHITE RIVER NEAR COLORADO-UTAH STATE LINE, UTAH—Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1				---	---	---	13.5	11.5	12.5	13.0	10.5	12.0
2				---	---	---	12.0	10.0	11.0	15.0	11.0	13.0
3				---	---	---	12.0	8.5	10.0	15.5	13.0	14.0
4				---	---	---	12.5	9.0	10.5	14.5	12.0	13.0
5				---	---	---	12.5	9.5	11.0	12.0	10.0	11.0
6				---	---	---	12.5	10.0	11.0	11.0	9.0	10.0
7				---	---	---	13.0	10.0	11.5	11.5	9.5	10.5
8				---	---	---	14.0	11.0	12.5	12.0	8.5	10.0
9				---	---	---	13.0	11.0	12.0	14.5	9.0	12.0
10				---	---	---	12.5	8.5	10.5	15.5	11.5	13.5
11				---	---	---	14.0	9.5	11.5	15.5	13.0	14.0
12				---	---	---	14.5	9.5	12.0	16.5	12.0	14.0
13				---	---	---	13.0	11.0	12.0	18.0	13.0	15.5
14				---	---	---	15.0	10.0	12.5	19.5	15.0	17.0
15				---	---	---	14.0	11.5	12.5	19.5	16.0	17.5
16				8.5	---	---	13.0	10.0	11.5	17.5	15.0	16.5
17				9.5	4.0	7.0	11.0	7.5	9.0	15.0	12.0	13.5
18				11.0	5.5	8.0	11.0	6.0	8.5	12.5	11.0	11.5
19				10.0	7.0	8.5	12.5	8.0	10.0	14.0	10.5	12.5
20				11.0	7.0	8.5	14.0	9.0	11.5	16.5	12.5	14.5
21				11.5	7.0	9.5	12.0	8.5	10.0	16.0	14.5	15.5
22				10.5	8.5	9.5	11.0	6.5	9.0	15.5	13.0	14.5
23				11.0	7.5	9.0	13.0	7.5	10.5	15.5	13.5	14.5
24				10.5	8.0	9.0	15.5	9.5	12.5	15.5	12.5	14.0
25				9.5	6.5	8.0	15.0	12.5	14.0	14.5	13.0	14.0
26				11.0	6.5	9.0	16.0	12.0	14.0	15.0	12.5	13.5
27				13.0	8.5	11.0	15.0	12.5	13.5	14.5	12.0	13.5
28				14.5	10.0	12.5	14.5	10.5	12.5	16.5	13.0	14.5
29				15.5	10.5	13.0	14.0	12.0	13.0	16.0	12.5	14.5
30				15.0	11.0	13.0	13.5	11.5	12.5	16.5	13.5	15.0
31				15.5	11.5	13.5	---	---	---	16.0	13.5	14.5
MONTH				15.5	4.0	10.0	16.0	6.0	11.5	19.5	8.5	13.5
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	15.5	13.0	14.5	19.0	16.5	18.0	28.5	24.0	26.0	23.0	18.0	20.5
2	16.0	13.0	14.5	19.5	16.5	18.0	29.0	24.5	26.5	23.5	18.5	21.0
3	16.5	14.0	15.0	19.5	16.5	18.0	29.0	24.0	26.5	24.5	19.5	22.5
4	15.5	13.5	14.5	20.0	16.5	18.0	29.0	24.0	26.5	25.5	20.0	23.0
5	15.0	13.5	14.5	20.0	17.0	18.5	29.5	24.0	27.0	25.0	20.5	23.0
6	16.5	12.5	14.5	20.5	17.0	19.0	29.0	25.0	27.0	24.5	20.5	22.5
7	16.5	13.0	15.0	21.5	18.0	19.5	30.5	25.0	27.5	23.5	20.0	22.0
8	17.5	14.5	16.0	21.5	18.0	20.0	30.5	25.5	28.0	20.5	16.5	18.5
9	17.5	14.5	16.0	22.5	18.5	20.5	31.0	26.0	28.5	19.5	16.0	17.5
10	17.5	16.0	16.5	22.5	19.5	21.0	26.0	21.0	24.0	19.5	17.0	18.5
11	17.0	15.0	16.0	21.0	19.0	20.5	25.5	21.0	23.5	18.0	15.5	16.5
12	16.5	14.5	15.5	22.5	18.5	20.5	24.5	22.0	23.5	17.5	14.0	15.5
13	16.0	13.5	15.0	23.5	19.0	21.5	24.0	20.5	22.0	17.5	13.5	15.5
14	16.5	14.0	15.5	24.0	19.5	22.0	21.5	18.5	20.0	16.0	13.5	15.0
15	16.5	14.0	15.5	22.5	20.5	21.5	21.0	15.5	18.5	17.5	13.5	15.5
16	16.5	14.5	15.5	22.0	19.5	21.0	23.5	19.5	21.5	19.0	14.5	16.5
17	16.5	14.0	15.5	23.5	20.0	22.0	21.0	16.0	18.5	18.5	16.0	17.0
18	16.0	13.5	15.0	23.5	20.0	22.0	22.5	18.0	20.0	16.0	13.0	14.5
19	16.0	14.0	15.0	24.0	20.5	22.5	23.0	17.0	20.0	13.0	10.0	11.5
20	17.0	14.0	15.5	25.0	21.5	23.5	22.5	18.0	20.5	12.0	8.5	10.0
21	16.5	14.5	15.5	25.5	22.0	23.5	22.5	18.0	20.5	13.5	8.0	10.5
22	18.0	15.5	16.5	25.5	20.5	23.0	23.0	19.5	21.0	14.5	9.5	12.0
23	18.0	16.0	17.0	26.0	21.0	23.5	23.0	18.5	21.0	16.0	11.0	13.5
24	18.5	16.5	17.5	26.5	21.5	24.0	23.0	18.0	20.5	17.0	12.5	15.0
25	18.5	16.5	17.5	27.5	22.5	25.0	23.5	18.5	21.0	19.0	14.5	17.0
26	18.0	16.0	17.0	28.5	23.0	26.0	23.5	18.5	21.0	19.0	14.5	17.0
27	17.5	15.5	16.5	29.0	23.5	26.5	23.0	18.0	20.5	18.5	14.5	17.0
28	17.5	16.0	17.0	28.5	24.5	26.5	23.5	18.0	21.0	18.5	14.0	16.5
29	17.5	16.0	17.0	29.5	25.0	27.0	23.0	18.5	21.0	18.5	14.0	16.5
30	18.5	15.5	17.0	30.0	25.0	27.5	23.0	18.0	21.0	18.0	13.5	16.0
31	---	---	---	28.0	25.0	26.5	22.5	19.5	21.0	---	---	---
MONTH	18.5	12.5	16.0	30.0	16.5	22.0	31.0	15.5	22.5	25.5	8.0	17.0
YEAR	31.0	.0	14.0									

TABLE 5.—Continued

09306395 WHITE RIVER NEAR COLORADO-UTAH STATE LINE, UTAH—Continued

SUSPENDED—SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN CONCENTRATION (MG/L)	LOADS (T/OAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/OAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/OAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/OAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/OAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/OAY)
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	220	111	---	640	---	320	---	240	---	240	---	480
2	210	98	---	590	---	350	---	210	---	240	---	470
3	210	107	---	540	---	300	---	160	---	240	---	470
4	205	99	---	580	---	300	---	110	---	240	---	470
5	210	96	---	550	---	330	---	130	---	240	---	520
6	3240	3240	---	540	---	310	---	210	---	230	---	610
7	23000	27000	---	980	300	250	---	250	---	230	---	860
8	11500	10200	---	710	---	180	---	230	---	230	---	920
9	2100	1640	690	670	---	230	---	200	---	280	---	1100
10	1430	1030	---	510	---	230	---	180	---	270	---	1100
11	820	558	---	410	---	180	---	190	---	210	---	1200
12	690	483	---	450	---	250	---	260	---	250	---	930
13	620	434	---	520	---	250	---	260	---	290	---	860
14	1000	783	---	500	---	240	---	250	---	290	---	840
15	790	593	---	460	---	240	---	170	---	290	---	830
16	780	602	---	450	---	240	---	200	---	260	730	733
17	900	734	---	450	---	240	---	200	---	230	---	650
18	800	635	---	450	---	240	244	201	---	200	---	680
19	540	417	---	420	---	91	---	200	---	170	---	990
20	660	510	---	340	---	91	---	200	---	120	---	1400
21	---	560	---	210	---	48	---	200	---	200	---	1900
22	---	580	---	66	---	24	---	200	256	200	---	1700
23	---	640	---	190	---	55	---	200	---	230	---	2400
24	---	580	---	530	---	71	---	200	---	220	---	3000
25	---	540	---	560	---	270	---	200	---	220	---	4500
26	---	520	---	570	---	250	---	230	---	280	---	1600
27	---	520	---	610	---	240	---	230	---	390	---	1100
28	---	520	---	530	---	230	---	230	---	440	---	1100
29	---	500	---	450	---	230	---	200	---	---	---	1100
30	---	560	---	400	---	250	---	150	---	---	---	1100
31	---	630	---	---	---	260	---	240	---	---	---	1200
TOTAL	---	55520	---	14876	---	6790	---	6331	---	6930	---	36813
DAY	MEAN CONCENTRATION (MG/L)	LOADS (T/OAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/OAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/OAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/OAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/OAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/OAY)
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	---	1500	---	4000	1710	10100	1040	6570	---	190	118	80
2	---	2300	---	3800	1880	10100	---	5700	---	200	102	70
3	---	2800	---	3400	2140	11800	---	4800	---	180	100	69
4	---	2200	---	4500	2180	12200	---	4300	---	160	91	62
5	---	1800	---	5700	2320	13800	---	3600	---	140	79	50
6	---	1900	---	5500	3130	20000	---	2900	---	140	61	35
7	---	1600	---	4700	2130	12300	---	2400	---	130	50	27
8	---	1400	---	4200	2270	13800	---	2200	---	120	61000	412000
9	---	1500	---	3800	1800	10800	---	1900	---	110	32600	5440
10	---	1700	---	3200	2480	16100	---	1600	92	92	5050	5710
11	---	1600	---	3400	3500	26900	---	1600	79	79	1100	1050
12	---	1400	---	3800	3300	29700	---	1800	89	89	400	373
13	---	1400	---	3700	3000	27600	---	1700	158	167	---	440
14	---	1600	---	4200	2660	23900	550	1450	3100	3780	---	380
15	---	1700	---	7200	---	28300	---	1200	1380	1670	---	330
16	---	1700	---	16000	---	26600	---	1000	552	778	---	340
17	---	1800	---	27000	---	24600	---	960	270	339	---	340
18	---	1800	5680	37300	---	21300	---	1100	179	205	---	350
19	---	1600	4630	23300	1140	11100	---	1200	117	131	---	420
20	---	1400	3480	14300	1040	9580	---	980	155	184	410	486
21	---	1300	3170	13000	720	6240	---	840	169	198	395	459
22	---	1400	3570	16900	500	3970	---	710	208	233	---	460
23	---	1400	3640	18700	---	4900	---	600	252	265	---	420
24	---	1300	3890	23200	---	6000	---	430	223	219	---	410
25	---	1200	4230	30200	---	7300	---	490	194	180	---	380
26	980	1520	3400	23700	---	9000	---	410	175	166	---	380
27	---	2000	2680	16200	---	8800	---	330	141	128	---	370
28	---	3600	2700	16600	---	7100	---	270	150	131	---	340
29	---	3800	2340	12900	---	7200	---	240	149	131	---	350
30	---	4100	2500	13400	1120	7590	---	220	131	109	---	340
31	---	---	2200	12600	---	---	---	210	128	92	---	---
TOTAL	---	56320	---	380400	---	428680	---	53710	---	10736	---	431961
TOTAL LOAD FOR YEAR:		1489067		TONS.								

TABLE 5.—Continued

09306395 WHITE RIVER NEAR COLORADO-UTAH STATE LINE, UTAH—Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SED1- MENT, SUS- PENDE (MG/L)	SED1- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM
OCT												
06...	1100	169	14.5	158	72	--	--	--	--	--	--	--
NOV												
09...	1420	330	5.0	690	615	--	--	--	--	--	--	--
DEC												
07...	1445	294	1.0	300	238	--	--	--	--	--	--	--
JAN												
18...	1445	305	.0	244	201	--	--	--	--	--	--	--
FEB												
22...	1200	290	.0	256	200	--	--	--	--	--	--	--
MAR												
16...	1130	372	4.5	730	733	--	--	--	--	--	--	--
APR												
26...	1300	567	13.0	981	1500	--	--	--	--	--	--	--
MAY												
18...	1230	2570	--	5810	40300	24	30	49	87	96	99	100
19...	1430	1870	12.0	4570	23100	--	--	--	--	--	--	--
JUN												
01...	1600	2140	15.0	1720	9940	20	22	29	64	85	98	100
12...	1730	3520	16.0	3500	33300	--	--	--	--	--	--	--
14...	1100	3400	15.0	2560	23500	--	--	--	--	--	--	--
19...	1645	3700	16.0	1640	16400	--	--	--	--	--	--	--
30...	1330	2720	17.0	1090	8010	--	--	--	--	--	--	--
JUL												
14...	1300	1030	20.0	550	1530	--	--	--	--	--	--	--
AUG												
10...	1500	370	25.5	75	75	--	--	--	--	--	--	--
SEP												
20...	1640	435	--	409	480	--	--	--	--	--	--	--

TABLE 5.—Continued

09306400 WHITE RIVER ABOVE HELLS HOLE CANYON, NEAR WATSON, UTAH

WATER-QUALITY RECORDS

LOCATION.—Lat 39°58'29", long 109°07'49", in SE1/4NW1/4SW1/4 sec.5, T.10 S., R.25 E., Uintah County, Hydrologic Unit 14050007, on left bank 0.1 mi (0.2 km) upstream from Hells Hole Canyon, 1.4 mi (2.3 km) upstream from Evacuation Creek, and 6.6 mi (10.6 km) north of Watson.

DRAINAGE AREA.—3,700 mi² (9,580 km²), approximately.

PERIOD OF RECORD.—August 1974 to September 1976 (discontinued). Miscellaneous sediment data for water years 1975-76 given below were not previously published.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM
MAR							
18...	1140	409	1.5	1100	1220	--	--
20...	1350	514	--	2280	3160	37	42
MAY							
06...	1330	630	8.5	658	1120	25	30
16...	1405	1020	16.0	5920	16300	--	--
27...	1500	1500	13.0	2220	8990	--	--
29...	1100	1880	11.5	3550	18000	--	--
JUN							
05...	1810	2350	16.5	2650	16800	26	29
09...	1245	3610	13.5	4320	42100	--	--
10...	1115	3730	12.0	3050	30700	--	--
19...	1235	2850	11.0	1600	12300	--	--
26...	1135	2420	12.5	1480	9670	--	--
JUL							
03...	0925	2550	16.5	1240	8540	--	--
10...	1550	2170	--	5670	33200	47	58
17...	1235	1380	18.0	8060	30000	--	--
24...	1300	844	21.0	392	893	--	--
AUG							
05...	1330	552	21.0	274	408	--	--
14...	1330	443	18.5	1210	1450	--	--
27...	1235	386	17.5	160	167	--	--
SEP							
09...	1320	330	20.0	24	21	--	--
17...	1235	410	18.0	357	395	--	--
25...	1315	453	13.5	198	242	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM
MAR						
18...	--	--	--	--	--	--
20...	72	94	96	100	--	--
MAY						
06...	45	68	82	98	100	--
16...	--	--	--	--	--	--
27...	--	--	--	--	--	--
29...	--	--	--	--	--	--
JUN						
05...	36	66	86	97	99	100
09...	--	--	--	--	--	--
10...	--	--	--	--	--	--
19...	--	--	--	--	--	--
26...	--	--	--	--	--	--
JUL						
03...	--	--	--	--	--	--
10...	78	91	95	99	100	--
17...	--	--	--	--	--	--
24...	--	--	--	--	--	--
AUG						
05...	--	--	--	--	--	--
14...	--	--	--	--	--	--
27...	--	--	--	--	--	--
SEP						
09...	--	--	--	--	--	--
17...	--	--	--	--	--	--
25...	--	--	--	--	--	--

09306400 WHITE RIVER ABOVE HELLS HOLE CANYON, NEAR WATSON, UTAH—Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SED1- MENT, SUS- PENDED (MG/L)	SED1- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM
NOV 25...	1300	451	.0	297	362	--	--	--	--	--	--
DEC 02...	1230	293	--	79	62	--	--	--	--	--	--
APR 05...	1330	490	9.5	1410	1870	--	--	--	--	--	--
13...	1215	521	11.0	676	951	--	--	--	--	--	--
15...	1045	560	9.5	615	930	32	38	52	73	81	100

TABLE 5.—Continued

09306405 HELLS HOLE CANYON CREEK AT MOUTH, NEAR WATSON, UTAH

LOCATION.—Lat 39°58'24", long 109°07'40", in NW1/4SE1/4SW1/4, sec.5, T.10 S., R.25 E., Uintah County, Hydrologic Unit 14050007, on right bank 0.1 mi (0.2 km) upstream from mouth and 6.5 mi (10.5 km) north of Watson.

DRAINAGE AREA.—24.5 mi² (63.5 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1974 to Jan. 6, 1976, and Feb. 24, 1976 to current year.

GAGE.—Water-stage recorder. Altitude of gage is 5,040 ft (1,536 m) from topographic map.

REMARKS.—Records fair.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 473 ft³/s (13.4 m³/s) Aug. 12, 1975, gage height, 3.75 ft (1.143 m), from rating curve extended above 88 ft³/s (2.49 m³/s) on basis of slope-area measurement of peak flow; no flow most of time.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 171 ft³/s (4.84 m³/s) Oct. 6, gage height, 2.54 ft (0.774 m), from rating curve extended above 88 ft³/s (2.49 m³/s) on basis of slope-area measurement of peak flow; no flow most of time.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	11	7.6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
31	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
TOTAL	11.00	7.82	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
MEAN	.35	.26	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
MAX	11	7.6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	22	16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

WTR YR 1978 TOTAL 18.82 MEAN .052 MAX 11 MIN .00 AC-FT 37

NOTE.—NO GAGE-HEIGHT RECORD NOV. 21 TO FEB. 22.

09306405 HELLS HOLE CANYON CREEK AT MOUTH, NEAR WATSON, UTAH

WATER-QUALITY RECORDS

PERIOD OF RECORD.—July 1975 to February 1976. Miscellaneous sediment data for water years 1975-76 given below were not previously published.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDEO (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDEO (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM
JUL												
16...	1455	1.9	19.0	78000	400	49	72	98	100	--	--	--
16...	1515	16	--	151000	6520	38	51	77	94	98	99	100
SEP												
10...	1415	40	22.5	277000	29900	--	--	--	--	--	--	--
10...	1550	88	22.0	185000	44000	--	--	--	--	--	--	--

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDEO (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDEO (T/DAY)
FEB					
11...	1520	2.4	1.0	3540	23
16...	1310	1.7	3.0	9420	43

TABLE 5.—Continued

09306410 EVACUATION CREEK ABOVE MISSOURI CREEK, NEAR DRAGON, UTAH

LOCATION.—Lat $39^{\circ}47'52''$, long $109^{\circ}04'26''$, in SW1/4SW1/4SW1/4 sec.1, T.12 S., R.25 E., Uintah County, Hydrologic Unit 14050007, on right bank 0.5 mi (0.8 km) upstream from Missouri Creek and 0.8 mi (1.3 km) north of Dragon.

DRAINAGE AREA.—100 mi² (259 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1974 to current year.

GAGE.—Water-stage recorder. Altitude of gage is 5,680 ft (1,731 m) from topographic map.

REMARKS.—Records good except those for winter period, which are fair.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 835 ft³/s (23.6 m³/s) Aug. 13, 1978, gage-height 8.32 ft (2.536 m), from rating curve extended above 10 ft³/s (0.28 m³/s) on the basis of slope-area measurements of peak flow; minimum, 0.06 ft³/s (0.0017 m³/s) Aug. 27, 1978.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 835 ft³/s (23.6 m³/s) Aug. 13, gage-height 8.32 ft (2.536 m), from rating curve extended above 10 ft³/s (0.28 m³/s) on the basis of slope-area measurements of peak flow; minimum, 0.06 ft³/s (0.0017 m³/s) Aug. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.38	.50	.50	.31	.45	.38	1.7	1.7	.38	1.7	.27	.15
2	.32	.50	.50	.30	.50	.80	3.3	1.4	.38	.60	.28	.13
3	.26	.44	.50	.35	.50	.60	2.4	.70	.38	.45	.28	.13
4	.20	.44	.50	.40	.50	.70	1.7	.58	.38	.42	.28	.13
5	.20	.44	.50	.44	.60	1.0	1.7	.70	.44	.40	.28	.13
6	14	23	.45	.44	.65	1.6	.85	1.0	.38	.35	.28	.14
7	4.1	2.0	.50	.40	.70	2.5	.70	1.0	.38	.32	.28	.14
8	.50	.13	.50	.35	.70	3.3	.85	.85	.44	.32	.28	.16
9	.58	.20	.45	.38	.70	5.1	.85	.58	.44	.31	.28	.16
10	.58	.25	.45	.44	.70	5.7	.70	.50	.38	.31	.29	.14
11	.50	.25	.50	.44	.58	5.1	.58	.58	.38	.30	.30	.16
12	.58	.20	.50	.38	.50	5.1	.50	.58	.38	.30	.30	.17
13	.70	.38	.55	.35	.45	3.3	.70	.58	.38	.30	.29	.17
14	.85	.44	.55	.35	.44	2.0	.70	.50	.38	.28	2.0	.18
15	.85	.44	.58	.42	.44	1.7	.70	.50	.38	.32	.50	.17
16	.85	.58	.50	.44	.42	.83	.70	.50	.38	.32	.28	.17
17	.70	.50	.45	.44	.40	1.0	.70	.58	.38	.32	.24	.17
18	.70	.50	.45	.38	.38	1.5	.50	.58	.32	.60	.27	.21
19	.70	.35	.40	.38	.45	2.0	.50	.50	.32	20	.26	.21
20	.70	.28	.35	.38	.50	2.5	.44	.50	.32	.70	.25	.26
21	.70	.25	.30	.38	.49	2.5	.44	.58	.32	.50	.24	.23
22	.58	.40	.30	.44	.46	1.9	.44	.58	.32	.40	.22	.23
23	.58	.75	.35	.45	.40	1.8	.38	.50	.32	.30	.23	.24
24	.58	.85	.38	.45	.44	2.4	.38	.50	.32	.29	.23	.22
25	.58	1.0	.40	.45	.44	1.7	.38	.50	.32	.28	.24	.21
26	.58	1.0	.40	.50	.70	.70	.38	.50	.32	.26	.24	.22
27	.50	.85	.40	.45	.80	.58	.50	.50	.32	.25	.17	.21
28	.58	.70	.44	.45	.60	.50	.50	.50	.32	.25	.14	.21
29	.58	.70	.38	.40	---	.50	1.4	.50	.38	.26	.15	.21
30	.70	.58	.32	.40	---	.50	2.0	.50	3.3	.26	.15	.21
31	.58	---	.32	.45	---	.50	---	.44	---	.27	.14	---
TOTAL	34.79	38.90	13.67	12.59	14.89	60.29	27.57	20.01	13.84	31.94	38.35	5.47
MEAN	1.12	1.30	.44	.41	.53	1.94	.92	.65	.46	1.03	1.24	.18
MAX	14	23	.58	.50	.80	5.7	3.3	1.7	3.3	20	29	.26
MIN	.20	.13	.30	.30	.38	.38	.38	.44	.32	.25	.14	.13
AC-FT	69	77	27	25	30	120	55	40	27	63	76	11

WTR YR 1978 TOTAL 312.31 MEAN .86 MAX 29 MIN .13 AC-FT 619

09306410 EVACUATION CREEK ABOVE MISSOURI CREEK,
NEAR DRAGON, UTAH—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—October 1974 to current year. Miscellaneous sediment data for water years 1975-76 given below were not previously published.

PERIOD OF DAILY RECORD.—

SPECIFIC CONDUCTANCE: October 1976 to September 1977.

WATER TEMPERATURES: October 1975 to current year (discontinued).

REMARKS.—Water-temperature recorder was not operated during the winter period.

EXTREMES FOR PERIOD OF DAILY RECORD.—

SPECIFIC CONDUCTANCE: Maximum daily (more than 20 percent missing record), 4,900 micromhos Sept. 9, 1977; minimum recorded, 2,040 micromhos, Aug. 23, 1977.

WATER TEMPERATURES: Maximum recorded (more than 20 percent missing record), 34.0°C July 11, 1976; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.—

WATER TEMPERATURES: Maximum recorded (more than 20 percent missing record), 31.5°C July 12, 14; minimum, 0.0°C on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW- INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L)	HARD- NESS (MG/L AS CACD3)	HARD- NESS, NONCAR- BONATE (MG/L CACD3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT											
27...	1700	.48	11.0	3980	7.8	9.0	5	960	540	120	160
NOV											
15...	1215	.48	10.0	4200	--	--	--	--	--	--	--
DEC											
05...	1245	.44	7.5	4200	7.9	8.5	--	--	--	--	--
JAN											
26...	1030	.53	4.0	4000	--	--	8	940	490	110	160
FEB											
22...	1330	.46	12.0	3800	7.8	8.2	--	--	--	--	--
MAR											
16...	1500	.83	16.0	4000	--	7.5	--	--	--	--	--
23...	0900	2.1	6.0	3500	7.6	9.0	--	--	--	--	--
APR											
28...	1500	.54	15.0	4500	--	7.8	27	920	490	120	150
MAY											
24...	1500	.37	22.0	4000	--	--	--	--	--	--	--
JUN											
09...	1020	.37	23.0	4000	--	--	--	--	--	--	--
JUL											
13...	1000	.30	15.0	4100	--	8.4	26	920	550	120	150
AUG											
15...	1930	.29	17.5	3800	8.1	8.1	--	--	--	--	--
SEP											
04...	1545	.13	24.5	3800	8.1	7.5	21	940	540	110	160
19...	1730	.18	11.0	4100	--	9.6	--	--	--	--	--

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACD3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLD- RIDE, DIS- SOLVED (MG/L AS CL)
OCT											
27...	650	60	9.1	3.8	510	0	420	13	.9	1800	24
NOV											
15...	--	--	--	--	--	--	--	--	--	--	--
DEC											
05...	--	--	--	--	--	--	--	--	--	--	--
JAN											
26...	650	60	9.3	3.6	540	--	443	--	--	1800	28
FEB											
22...	--	--	--	--	--	--	--	--	--	--	--
MAR											
16...	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--
APR											
28...	650	61	9.3	4.7	520	--	430	--	.0	1800	29
MAY											
24...	--	--	--	--	--	--	--	--	--	--	--
JUN											
09...	--	--	--	--	--	--	--	--	--	--	--
JUL											
13...	670	61	9.6	3.6	450	--	370	--	--	1800	29
AUG											
15...	--	--	--	--	--	--	--	--	--	--	--
SEP											
04...	620	59	8.8	4.4	490	0	400	6.2	.2	1700	31
19...	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.—Continued

09306410 EVACUATION CREEK ABOVE MISSOURI CREEK, NEAR DRAGON, UTAH—Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	FLUORIDE, OIS- SOLVED (MG/L AS F)	BROMIDE DIS- SOLVED (MG/L AS BR)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3)
OCT 27...	.7	.2	11	3100	3100	3020	4.22	4.02	6	.01	.04
NOV 15...	--	--	--	--	--	--	--	--	--	--	--
DEC 05...	--	--	--	--	--	--	--	--	--	--	--
JAN 26...	.6	--	11	--	--	3050	4.15	4.36	--	3.9	17
FEB 22...	--	--	--	--	--	--	--	--	--	--	--
MAR 16...	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--
APR 28...	.7	.2	12	3080	3200	3030	4.19	4.49	96	.04	.18
MAY 24...	--	--	--	--	--	--	--	--	--	--	--
JUN 09...	--	--	--	--	--	--	--	--	--	--	--
JUL 13...	.7	--	13	3120	--	3010	4.24	2.53	--	.07	.31
AUG 15...	--	--	--	--	--	--	--	--	--	--	--
SEP 04...	.7	.2	12	3130	--	2880	4.26	2.03	11	.01	.04
19...	--	--	--	--	--	--	--	--	--	--	--

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHDRUS, TOTAL (MG/L AS P)	PHOS- PHORUS TOTAL (MG/L AS PD4)	PHOS- PHDRUS, DRTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, DRTHO, DIS- SOLVED (MG/L AS PO4)
OCT 27...	.00	.00	.01	.00	.00	.07	.00	.00	.00	.00
NOV 15...	--	--	--	--	--	--	--	--	--	--
DEC 05...	--	--	--	--	--	--	--	--	--	--
JAN 26...	.00	.00	3.9	.00	.00	.21	.02	--	--	.00
FEB 22...	--	--	--	--	--	--	--	--	--	--
MAR 16...	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--
APR 28...	.00	.00	.04	.00	.00	.54	.04	.12	.00	.00
MAY 24...	--	--	--	--	--	--	--	--	--	--
JUN 09...	--	--	--	--	--	--	--	--	--	--
JUL 13...	.00	.00	.07	.01	.01	.23	.00	--	.04	.12
AUG 15...	--	--	--	--	--	--	--	--	--	--
SEP 04...	.00	.00	.01	.01	.01	.23	.02	.06	.00	.00
19...	--	--	--	--	--	--	--	--	--	--

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)
OCT 27...	1700	10	1	0	170	0	0	2	10
JAN 26...	1030	10	--	--	170	--	--	--	50
APR 28...	1500	0	1	0	170	0	0	0	20
JUL 13...	1000	5	--	--	170	--	--	--	30
SEP 04...	1545	20	1	100	180	0	10	1	50

TABLE 5.—Continued

09306410 EVACUATION CREEK ABOVE MISSOURI CREEK, NEAR DRAGON, UTAH—Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 27...	1	40	40	.0	5	2	3400	.7	10
JAN 26...	--	300	20	--	--	--	3100	--	--
APR 28...	0	40	20	.0	9	2	3100	.0	10
JUL 13...	--	40	40	--	--	--	3100	--	--
SEP 04...	5	40	20	.0	11	1	3300	.0	10

DATE	TIME	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90)
OCT 27...	1700	<30	<.4	<7.6	<.4	<6.6	<.4
APR 28...	1500	<38	4.3	<9.9	4.1	<8.8	4.1
SEP 04...	1545	<35	<.4	<12	.6	<11	.6

DATE	TIME	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C)	CARBON, INOR- GANIC, TOTAL (MG/L AS C)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT 27...	1700	1.7	.3	98	1	.10
JAN 26...	1030	--	--	100	--	--
APR 28...	1500	2.3	.4	81	4	.00
SEP 04...	1545	6.6	.4	100	3	.00

TABLE 5.--CONTINUED

09306410 EVACUATION CREEK ABOVE MISSOURI CREEK,
NEAR DRAGON, UTAH--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA

WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

BENTHIC INVERTEBRATES

DIVISIONS: .CLASS		DIVERSITY INDEX = 2.32		
..ORDER				
...FAMILY				
....GENUS				
.....SPECIES				
DATE	ORGANISM	COMMON NAME	ORGANISM COUNT	SAMPLING METHOD
OCT. 28	.INSECTA			4 SURBER SAMPLES (4FT ² TOTAL)
	..EPHEMEROPTERA	MAYFLIES		
	...BAETIDAE			
	....BAETIS		2
	..COLEOPTERA			
	...DYTISCIDAE			
	....AGABUS		1
	...HYDRAENIDAE			
	....OCHTHEBIUS		1
	..DIPTERA			
	...TIPULIDAE	CRANE FLIES		
	....TIPULA		4
	...DIXIDAE			
	....(UNIDENTIFIED SP.)		1
	...SIMULIIDAE	BLACK FLIES		
	....SIMULIUM		4
TOTAL			13	

TABLE 5.--CONTINUED

09306410 EVACUATION CREEK ABOVE MISSOURI CREEK,
NEAR DRAGON, UTAH--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA

WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

BENTHIC INVERTEBRATES

DIVISIONS: .CLASS		DIVERSITY INDEX = 1.34		
..ORDER				
...GAMILY				
....GENUS				
.....SPECIES				
DATE	ORGANISM	COMMON NAME	ORGANISM COUNT	SAMPLING METHOD
MAY 27	..INSECTA			4 SURBER SAMPLES (4 FT ² TOTAL)
	..EPHEMEROPTERA	MAYFLIES		
	...HEPTAGENIIDAE			
	....HEPTAGENIA		2
	...BAETIDAE			
	....BAETIS		1
	..ODONATA			
	...COENAGRIONIDAE	DAMSELFLIES		
	....ARGIA		
	.....EMMA		1
	..COLEOPTERA			
	...HYDROPHILIDAE	WATER SCAVENGER BEETLES		
	....LACCOBIUS		2
	..TRICHOPTERA	CADDISFLIES		
	...HYDROPSYCHIDAE			
	....HYDROPSYCHE		1
	..DIPTERA			
	...SIMULIIDAE	BLACK FLIES		
	.....SIMULIUM		22
	TOTAL		29	

TABLE 5.--CONTINUED

09306410 EVACUATION CREEK ABOVE MISSOURI CREEK,
NEAR DRAGON, UTAH---CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA

WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

BENTHIC INVERTEBRATES

DIVISIONS: .CLASS		DIVERSITY INDEX = 2.41		
..ORDER				
...FAMILY				
....GENUS				
.....SPECIES				
DATE	ORGANISM	COMMON NAME	ORGANISM COUNT	SAMPLING METHOD
JULY 27	.INSECTA			4 SURBER SAMPLES (4 FT ² TOTAL)
	..EPHEMEROPTERA	MAYFLIES		
	...BAETIDAE			
	....BAETIS		1	
	..ODONATA			
	...GOMPHIDAE	DRAGONFLIES		
	....OPHIOGOMPHUS			
	.....SEVERUS		1	
	...COENAGRIONIDAE	DAMSELFLIES		
	....ARGIA			
	.....EMMA		2	
	..HEMIPTERA			
	...CORIXIDAE	WATER BOATMEN		
	....HESPEROCORIXA		1	
	..COLEOPTERA			
	...DYTISCIDAE			
	....DERONECTES		1	
	...HYDROPHILIDAE	WATER SCAVENGER BEETLES		
	....LACCOBIUS		1	
	..DIPTERA			
	...SIMULIIDAE	BLACK FLIES		
	....SIMULIUM		12	
	...CHIRONOMIDAE			
	....CONCHAPELOPIA OR			
	....ARCTOPELOPIA OR			
	....RHEOPELOPIA		1	
	....EUKIEFFERIELLA		1	
	...MUSCIDAE			
	....LIMNOPHORA		1	
	TOTAL		22	

TABLE 5.—Continued

09306410 EVACUATION CREEK ABOVE MISSOURI CREEK, NEAR DRAGON, UTAH—Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER				NOVEMBER			DECEMBER			JANUARY		
1	20.5	1.5	8.5									
2	20.5	2.0	9.0									
3	22.0	5.5	11.0									
4	21.0	4.0	11.0									
5	18.5	9.0	12.5									
6	20.0	7.5	12.5									
7	23.0	4.0	11.0									
8	22.0	.5	8.0									
9	23.5	1.5	9.0									
10	18.5	1.5	7.5									
11	22.0	.0	6.0									
12	21.5	.0	6.5									
13	23.0	.0	8.0									
14	23.5	2.0	9.0									
15	23.0	2.5	9.5									
16	23.5	1.5	9.5									
17	24.5	2.0	9.5									
18	24.5	1.5	9.0									
19	22.5	1.5	8.5									
20	22.0	4.0	10.0									
21	22.0	5.0	9.5									
22	22.5	2.0	8.5									
23	24.0	1.0	8.0									
24	24.0	1.0	8.0									
25	26.0	1.0	8.5									
26	23.5	.0	8.5									
27	22.0	1.0	8.5									
28	17.0	4.0	8.5									
29	16.0	5.5	9.0									
30	15.5	4.0	8.0									
31	---	---	---									
MONTH	26.0	.0	9.0									

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1				---	---	---	13.5	6.5	9.0	20.0	4.0	10.0
2				---	---	---	16.0	5.0	8.5	20.5	4.0	11.0
3				---	---	---	15.5	4.5	8.5	23.5	6.5	11.5
4				---	---	---	18.5	2.5	8.5	18.0	4.0	9.0
5				---	---	---	18.5	6.0	9.5	13.0	3.0	7.0
6				---	---	---	18.5	5.0	9.5	16.5	3.0	7.5
7				---	---	---	18.5	5.0	10.0	18.0	4.0	9.5
8				---	---	---	15.5	5.5	9.5	18.5	4.0	9.5
9				---	---	---	14.0	3.5	8.5	25.0	2.5	11.0
10				---	---	---	20.0	1.5	9.0	22.0	5.0	11.5
11				---	---	---	22.5	3.5	10.5	18.0	6.0	10.5
12				---	---	---	20.5	3.0	10.0	24.0	3.5	12.0
13				---	---	---	16.0	5.0	9.0	27.0	4.5	13.0
14				---	---	---	17.5	6.5	10.0	26.5	5.5	14.0
15				---	---	---	17.5	5.5	10.0	26.0	6.5	14.0
16				---	---	---	---	---	---	23.5	6.5	12.0
17				19.0	1.0	7.5	---	---	---	19.5	7.0	10.5
18				19.0	1.5	8.0	---	---	---	21.5	5.0	11.5
19				11.5	3.0	6.5	---	---	---	26.0	4.5	13.0
20				18.5	1.0	8.0	---	---	---	25.5	5.5	14.0
21				17.5	.5	8.0	10.0	1.0	5.5	19.0	8.5	11.5
22				11.5	4.5	7.0	17.5	.5	7.5	---	---	---
23				16.0	3.5	8.0	21.0	3.0	10.0	---	---	---
24				14.5	3.0	7.5	23.5	3.0	11.5	---	---	---
25				18.5	.0	7.5	16.0	5.5	10.0	22.5	5.0	12.0
26				20.5	1.0	8.5	21.5	4.5	11.0	25.0	4.5	12.5
27				20.0	2.0	9.5	13.0	5.0	8.0	25.5	5.5	12.0
28				21.5	3.5	10.0	18.0	3.5	9.0	26.5	5.5	14.0
29				22.0	2.5	10.0	19.0	4.5	9.0	26.0	5.5	13.5
30				19.5	3.5	10.0	15.5	4.5	9.0	26.0	6.5	13.5
31				20.5	5.0	11.0	---	---	---	25.0	6.0	13.0
MONTH				22.0	.0	8.5	23.5	.5	9.0	27.0	2.5	11.5

TABLE 5.—Continued

09306410 EVACUATION CREEK ABOVE MISSOURI CREEK, NEAR DRAGON, UTAH—Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	26.0	4.0	13.0	---	---	---	---	---	---	27.5	7.5	15.5
2	26.0	4.5	13.0	---	---	---	---	---	---	27.5	8.0	16.0
3	25.5	6.5	13.5	---	---	---	---	---	---	28.0	9.0	16.0
4	27.0	7.5	13.5	---	---	---	---	---	---	27.5	8.5	16.0
5	21.0	7.0	12.5	---	---	---	---	---	---	29.0	8.5	17.0
6	26.5	6.0	15.0	---	---	---	---	---	---	28.5	9.5	17.5
7	26.5	7.0	14.5	---	---	---	---	---	---	28.0	11.0	17.0
8	28.0	6.5	15.5	---	---	---	---	---	---	23.0	10.0	15.0
9	26.5	6.5	15.0	---	---	---	---	---	---	27.5	8.5	15.5
10	25.5	8.5	14.5	---	---	---	---	---	---	25.5	9.5	15.0
11	26.0	7.5	15.0	---	---	---	---	---	---	23.0	8.5	13.0
12	27.0	5.5	14.5	31.5	11.5	22.5	---	---	---	24.5	5.0	12.5
13	27.5	6.5	15.0	31.0	8.0	18.0	---	---	---	24.5	4.5	12.5
14	25.5	6.5	14.0	31.5	9.0	18.5	---	---	---	21.0	4.5	11.5
15	27.0	6.5	15.0	26.0	10.0	16.5	---	---	---	24.0	8.5	14.5
16	26.5	6.5	15.0	30.0	11.5	18.5	26.5	7.5	15.5	27.0	7.0	14.5
17	27.5	6.0	15.0	26.5	12.0	17.5	28.0	8.0	15.0	22.5	10.5	14.5
18	27.0	6.0	15.0	30.5	10.0	16.5	25.5	7.5	14.5	21.0	6.0	11.0
19	27.0	7.5	15.5	---	---	---	26.5	5.0	14.5	12.5	5.5	8.0
20	29.0	6.0	16.0	---	---	---	25.5	7.5	15.5	19.5	4.5	10.0
21	29.5	7.0	16.5	---	---	---	25.0	9.5	16.5	22.5	2.5	10.0
22	28.5	8.0	16.5	---	---	---	26.0	12.0	17.5	23.5	3.5	11.5
23	29.0	8.0	16.5	---	---	---	28.0	9.5	16.5	24.5	5.0	12.0
24	29.5	11.0	17.0	---	---	---	28.5	8.0	16.5	23.5	5.5	13.0
25	27.5	8.5	16.0	---	---	---	25.0	8.0	15.0	24.5	8.0	14.0
26	27.0	6.5	15.0	---	---	---	29.5	7.0	15.5	26.5	7.0	13.5
27	27.0	7.5	16.0	---	---	---	28.0	5.5	14.5	23.5	6.5	13.0
28	20.0	9.5	14.5	---	---	---	28.5	7.0	15.5	25.0	6.5	13.5
29	25.5	10.5	15.5	---	---	---	29.0	7.0	15.5	25.0	6.5	13.0
30	11.5	10.5	11.0	---	---	---	27.0	7.0	15.0	23.5	4.5	11.5
31	---	---	---	---	---	---	26.0	10.0	15.5	---	---	---
MONTH	29.5	4.0	15.0	31.5	8.0	18.5	29.5	5.0	15.5	29.0	2.5	13.5
YEAR	31.5	.0	12.0									

TABLE 5.—Continued

09306410 EVACUATION CREEK ABOVE MISSOURI CREEK, NEAR DRAGON, UTAH—Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	STREAM- FLOW, INSTAN- TANEDUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM
JAN 20...	1212	.34	2.0	251	.23	--	--	--	--	--	--
FEB 20...	1305	.30	7.5	32	.03	--	--	--	--	--	--
MAR 06...	1115	.96	4.0	1650	4.3	--	--	--	--	--	--
21...	1150	.34	14.5	50	.05	--	--	--	--	--	--
APR 18...	1315	1.4	8.0	806	3.0	48	68	97	98	99	100
MAY 07...	1230	2.4	9.0	7380	48	84	92	97	100	--	--
JUN 03...	1425	2.5	20.0	3220	22	53	74	92	95	98	100
AUG 19...	1415	.22	26.0	30	.02	--	--	--	--	--	--

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	STREAM- FLOW, INSTAN- TANEDUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM
OCT 08...	1230	.39	10.5	28	.03	--	--	--	--	--	--
NOV 05...	1300	.27	13.0	114	.09	--	--	--	--	--	--
DEC 03...	1330	.48	5.5	93	.12	--	--	--	--	--	--
JAN 06...	1500	.20	4.0	83	.04	--	--	--	--	--	--
FEB 13...	1800	6.3	.0	7800	133	--	--	--	--	--	--
APR 05...	1300	1.8	13.5	3680	18	44	57	86	97	99	100
MAY 06...	1400	2.7	10.5	6750	49	--	--	--	--	--	--
12...	1530	2.8	16.5	3840	29	--	--	--	--	--	--
AUG 19...	1330	.21	25.0	161	.09	--	--	--	--	--	--

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEDUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
JAN 26...	1100	.53	4.0	500	.72
FEB 22...	1330	.46	12.0	212	.26
MAR 16...	1500	.83	16.0	1780	4.0
23...	0930	2.1	6.0	1700	9.6
APR 28...	1615	.54	15.0	455	.66
JUN 09...	1130	.37	23.0	6	<.01
JUL 13...	1000	.30	15.0	2	<.01

TABLE 5.—Continued

09306415 EVACUATION CREEK BELOW PARK CANYON, NEAR WATSON, Utah

WATER-QUALITY RECORDS

LOCATION.—Lat 39°50'44", long 109°07'48", in SW1/4NW1/4SW1/4 sec.21, T.11 S., R.25 E., Uintah County, Hydrologic Unit 14050007, on right bank 0.4 mi (0.6 km) downstream from Park Canyon and 3.0 mi (4.8 km) southeast of Watson.

DRAINAGE AREA.—246 mi² (637 km²).

PERIOD OF RECORD.—November 1974 to December 1975 (discontinued). Miscellaneous sediment data for water years 1975-76 given below were not previously published.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	STREAM- FLOW, INSTAN- TANEDUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM
DEC												
04...	1600	.18	--	8	<.01	--	--	--	--	--	--	--
JAN												
08...	1330	.20	.0	279	.15	--	--	--	--	--	--	--
MAR												
05...	1245	3.4	.5	3400	31	--	--	--	--	--	--	--
21...	1100	.27	5.0	8	<.01	--	--	--	--	--	--	--
26...	1400	1.4	4.0	23100	87	69	75	95	99	99	100	--
APR												
08...	1435	2.7	7.5	4310	31	67	80	95	99	100	--	--
11...	1320	1.1	8.0	851	2.5	--	--	--	--	--	--	--
18...	1235	2.0	6.0	814	4.4	--	--	--	--	--	--	--
25...	1325	1.7	13.0	4680	21	--	--	--	--	--	--	--
MAY												
07...	1540	2.9	11.5	6520	51	82	97	99	100	--	--	--
23...	1230	6.4	10.0	7240	125	--	--	--	--	--	--	--
28...	1440	30	--	77700	6290	--	--	--	--	--	--	--
29...	1300	46	8.0	29400	3650	56	61	70	87	95	99	100
JUN												
04...	1150	1.8	18.5	971	4.7	62	89	97	98	99	100	--
24...	1145	1.4	17.5	904	3.4	--	--	--	--	--	--	--
JUL												
23...	1310	.20	22.0	216	.12	--	--	--	--	--	--	--
AUG												
22...	1330	.28	24.5	1400	1.1	--	--	--	--	--	--	--
SEP												
11...	1035	2.4	15.0	31200	202	--	--	--	--	--	--	--
11...	1700	.91	22.5	15600	38	81	96	100	--	--	--	--
16...	1350	.24	24.0	606	.39	--	--	--	--	--	--	--

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	STREAM- FLOW, INSTAN- TANEDUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
OCT					
31...	1125	.73	5.5	725	1.4
NOV					
20...	1455	.47	.0	494	.63

09306420 EVACUATION CREEK AT WATSON, UTAH

WATER-QUALITY RECORDS

LOCATION.—Lat 39°48'01", long 109°11'11", in NW1/4NW1/4NE1/4 sec.7, T.11 S., R.25 E., Uintah County, Hydrologic Unit 14050007, on right bank in the center of Watson and 1.5 mi (2.4 km) upstream from Evacuation Creek tributary.

DRAINAGE AREA.—259 mi² (671 km²).

PERIOD OF RECORD.—October 1974 to September 1976 (discontinued). Miscellaneous sediment data for water years 1975-76 given below were not previously published.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	STREAM- FLOW, INSTAN- TANEDUS (CFS)	TEMPER- ATURE (DEG C)	SED1- MENT, SUS- PENDE (MG/L)	SED1- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM
NOV							
14...	1300	.01	9.5	49	<.01	27	30
DEC							
05...	1240	.26	1.0	49	.03	--	--
MAR							
04...	1200	7.3	1.0	2410	48	--	--
04...	1450	9.9	1.5	5950	159	--	--
04...	1600	8.8	1.0	4260	101	53	65
11...	1420	1.1	.5	1740	5.2	--	--
APR							
09...	1500	2.0	5.0	441	2.4	55	77
23...	1355	.62	10.5	7060	12	--	--
30...	1340	1.6	9.0	473	2.0	--	--
MAY							
08...	1500	2.7	16.0	1060	7.7	67	86
23...	1430	5.6	9.0	7440	112	--	--
28...	1225	46	9.0	94500	11700	--	--
29...	1435	43	9.5	32800	3810	--	--
30...	1320	7.1	19.5	5540	106	--	--
JUN							
20...	1120	1.7	11.0	2500	11	50	53
JUL							
15...	1600	2.5	22.5	7060	48	--	--
SEP							
10...	1300	5.9	21.0	38000	605	49	73

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM
NOV						
14...	--	91	99	100	--	--
DEC						
05...	--	--	--	--	--	--
MAR						
04...	--	--	--	--	--	--
04...	--	--	--	--	--	--
04...	83	95	97	100	--	--
11...	--	--	--	--	--	--
APR						
09...	92	98	99	100	--	--
23...	--	--	--	--	--	--
30...	--	--	--	--	--	--
MAY						
08...	97	99	99	100	--	--
23...	--	--	--	--	--	--
28...	--	--	--	--	--	--
29...	--	--	--	--	--	--
30...	--	--	--	--	--	--
JUN						
20...	59	61	64	83	99	100
JUL						
15...	--	--	--	--	--	--
SEP						
10...	96	99	100	--	--	--

TABLE 5.—Continued

09306420 EVACUATION CREEK AT WATSON, UTAH—Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
OCT					
09...	1420	.01	15.0	16	<.01
NOV					
05...	1700	.05	9.0	20	<.01
DEC					
04...	1400	.08	2.5	186	.04
18...	1135	.04	.0	84	<.01
JAN					
23...	1245	.03	1.0	112	<.01
FEB					
11...	1340	6.6	.0	5820	104
16...	1120	4.4	.0	2510	30
18...	1525	3.2	--	4460	39
MAR					
19...	1120	4.8	5.0	18000	233
APR					
08...	1100	1.9	7.5	2260	12
13...	1430	1.2	18.0	1490	4.8
15...	1315	2.0	9.0	1750	9.4
JUL					
08...	--	14	--	183000	6920
08...	2100	11	--	166000	4930

TABLE 5.—Continued

09306430 EVACUATION CREEK NEAR WATSON, UTAH

LOCATION.—Lat 39°57'08", long 109°09'31", in NE1/4SW1/4NE1/4 sec.13, T.10 S., R.24 E., Uintah County, Hydrologic Unit 14050007, on right bank 2.2 mi (3.5 km) upstream from mouth and 4.8 mi (7.7 km) north of Watson.

DRAINAGE AREA.—284 mi² (736 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1974 to current year.

GAGE.—Water-stage recorder and artificial control. Altitude of gage is 5,050 ft (1,539 m) from topographic map.

REMARKS.—Records good.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,300 ft³/s (36.8 m³/s) Aug. 13, 1978, gage height, 6.57 ft (2.003 m), from rating curve extended above 20 ft³/s (0.57 m³/s) on the basis of slope-area measurements of peak flow; no flow at times for some years.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 1,300 ft³/s (36.8 m³/s) Aug 13, gage height, 6.57 ft (2.003 m), from rating curve extended above 20 ft³/s (0.57 m³/s) on the basis of slope-area measurements of peak flow; no flow for all of Nov. 22 and Feb. 19, result of freezeup.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.07	.11	.07	.04	.03	.15	.45	1.0	.35	.11	.06	.03
2	.11	.11	.04	.04	.03	.25	.80	1.0	.25	.11	.05	.04
3	.11	.11	.04	.04	.03	.25	2.2	1.0	.25	.11	.04	.04
4	.11	.11	.04	.04	.03	.40	1.8	.60	.25	.07	.04	.04
5	.11	.11	.04	.03	.03	.50	1.0	.60	.25	.07	.04	.04
6	.60	1.2	.07	.03	.03	1.0	.60	1.2	.23	.07	.04	.04
7	32	27	.04	.03	.02	3.6	.80	1.0	.21	.07	.04	.05
8	.15	.15	.04	.03	.02	1.2	1.0	.80	.18	.07	.04	.04
9	.08	.10	.07	.03	.03	.80	1.0	.60	.18	.07	.04	.04
10	.08	.09	.04	.03	.04	.80	.80	.60	.18	.07	.04	.04
11	.08	.08	.07	.03	.04	.80	.80	.60	.18	.07	.04	.04
12	.08	.07	.04	.03	.04	1.5	.80	.60	.18	.07	.04	.04
13	.08	.07	.07	.03	.02	1.5	.80	.60	.18	.07	.66	.04
14	.08	.07	.04	.03	.01	1.0	.80	.60	.18	.07	.50	.04
15	.08	.07	.04	.03	.03	.45	.80	.45	.18	.07	.15	.04
16	.08	.07	.04	.04	.03	.60	.80	.45	.18	.07	.08	.04
17	.08	.07	.07	.03	.03	.60	.80	.45	.18	.06	.05	.04
18	.08	.07	.04	.03	.03	.60	.80	.45	.11	.05	.05	.05
19	.07	.07	.04	.03	.00	.45	.80	.45	.11	1.7	.04	.03
20	.07	.03	.04	.03	.01	.45	.80	.45	.11	.13	.04	.03
21	.07	.01	.03	.03	.04	.45	.80	.45	.11	.10	.06	.03
22	.07	.00	.04	.03	.04	.60	.80	.45	.11	.10	.06	.03
23	.07	.07	.04	.03	.04	1.5	.80	.45	.11	.10	.05	.03
24	.07	.07	.04	.03	.04	3.9	.80	.35	.11	.10	.03	.03
25	.07	.07	.04	.03	.04	2.5	.80	.35	.11	.10	.03	.03
26	.07	.07	.07	.03	.04	1.5	.80	.35	.11	.10	.03	.03
27	.07	.07	.04	.03	.15	.80	.60	.35	.11	.09	.03	.03
28	.07	.07	.04	.03	.15	.45	.60	.35	.11	.09	.04	.04
29	.18	.04	.04	.03	---	.45	.60	.35	.11	.09	.04	.04
30	.11	.04	.04	.03	---	.45	.60	.35	.11	.08	.04	.04
31	.11	---	.04	.03	---	.45	---	.35	---	.07	.04	---
TOTAL	35.16	30.27	1.44	.98	1.07	29.95	25.65	17.65	5.02	4.20	67.87	1.12
MEAN	1.13	1.01	.046	.032	.038	.97	.84	.57	.17	.14	2.19	.037
MAX	32	27	.07	.04	.15	3.9	2.2	1.2	.35	1.7	.66	.05
MIN	.07	.00	.03	.03	.00	.15	.45	.35	.11	.05	.03	.03
AC-FT	70	60	2.9	1.9	2.1	59	51	35	10.0	8.3	135	2.2
WTR YR 1978	TOTAL 220.38 MEAN .60 MAX 66 MIN .00 AC-FT 437											

09306430 EVACUATION CREEK NEAR WATSON, UTAH—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—August 1974 to current year. The miscellaneous sediment data for water years 1975-76 given below were not previously published.

PERIOD OF DAILY RECORD.—

SPECIFIC CONDUCTANCE: October 1975 to September 1977.

WATER TEMPERATURES: October 1974 to current year.

SUSPENDED-SEDIMENT DISCHARGE: October 1976 to current year.

REMARKS.—Specific conductance and water temperature recorders are not generally operated during the winter period. Suspended-sediment loads were computed using sediment-rating curves and periodic samples.

EXTREMES FOR PERIOD OF DAILY RECORD.—

SPECIFIC CONDUCTANCE: Maximum recorded (considerable missing record), 7,320 micromhos Nov. 27, 1976; minimum recorded, 559 micromhos May 10, 1976.

WATER TEMPERATURES: Maximum recorded, 33.5°C July 11, 1977, July 14, 1978; minimum, 0.0°C on many days during winter periods.

SEDIMENT LOADS.—Maximum daily, 35,700 tons (32,400 tonnes) July 5, 1977; 0 tons on many days.

EXTREMES FOR CURRENT YEAR.—

WATER TEMPERATURES: Maximum recorded, 33.5°C July 14; minimum, 0.0°C on many days during winter period.

SEDIMENT LOADS: Maximum daily, 33,000 tons (29,900 tonnes) Aug. 13; 0 tons on many days.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW- INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	OXYGEN DEMAND- CHEM- ICAL (LOW LEVEL) (MG/L)	HARD- NESS (MG/L AS CACD3)	HARD- NESS- NONCAR- BONATE (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM- DIS- SOLVED (MG/L AS MG)
DOY										
27...	1430	.06	16.5	4500	7.8	10.6	30	1100	710	170
NOV										
15...	1500	.07	11.0	4600	7.8	7.5	--	--	--	--
DEC										
06...	1100	.08	1.0	4350	7.9	9.2	--	--	--	--
JAN										
25...	1530	.03	.5	4100	--	9.0	23	1100	690	170
FEB										
22...	1020	.05	.0	2250	8.0	8.0	--	--	--	--
MAR										
07...	1510	3.6	11.0	2150	8.1	7.4	--	--	--	--
APR										
27...	1200	.50	12.0	5000	--	7.9	37	1100	660	190
MAY										
24...	1115	.38	20.0	4600	--	8.4	--	--	--	--
JUL										
12...	1600	.08	30.5	4800	--	10.4	60	1100	920	150
AUG										
01...	1400	.04	32.0	5000	--	7.6	--	--	--	--
16...	0740	.08	11.0	4400	7.9	--	--	--	--	--
SEP										
04...	1430	.04	32.0	4200	7.8	7.2	25	1100	690	150
07...	1120	.04	25.0	4900	8.1	7.2	--	--	--	--

DATE	SODIUM DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AO- SDRP- TION RATIO	POTAS- SIUM- DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CD3)	ALKA- LINITY (MG/L AS CACD3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CD2)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
DOY											
27...	750	59	9.7	8.4	510	0	420	13	.8	2100	51
NOV											
15...	--	--	--	--	--	--	--	--	--	--	--
DEC											
06...	--	--	--	--	--	--	--	--	--	--	--
JAN											
25...	730	58	9.5	7.0	530	--	430	--	--	2200	10
FEB											
22...	--	--	--	--	--	--	--	--	--	--	--
MAR											
07...	--	--	--	--	--	--	--	--	--	--	--
APR											
27...	680	57	9.0	10	530	--	430	--	.0	2100	44
MAY											
24...	--	--	--	--	--	--	--	--	--	--	--
JUL											
12...	790	61	10	10	190	--	160	--	--	2300	54
AUG											
01...	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--
SEP											
04...	730	59	9.7	11	470	0	390	12	.0	2200	50
07...	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.—Continued

09306430 EVACUATION CREEK NEAR WATSON, UTAH—Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	FLUORIDE, DIS- SOLVED (MG/L AS F)	BROMIDE DIS- SOLVED (MG/L AS BR)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3)
OCT 27...	.9	.5	10	3670	3700	3520	4.99	.59	5	.01	.04
NOV 15...	--	--	--	--	--	--	--	--	--	--	--
DEC 06...	--	--	--	--	--	--	--	--	--	--	--
JAN 25...	.7	--	9.9	3600	--	3570	4.90	.29	--	.03	.13
FEB 22...	--	--	--	--	--	--	--	--	--	--	--
MAR 07...	--	--	--	--	--	--	--	--	--	--	--
APR 27...	.9	.2	11	3530	3400	3460	4.80	4.77	4	.84	3.7
MAY 24...	--	--	--	--	--	--	--	--	--	--	--
JUL 12...	1.0	--	8.4	3880	--	3580	5.28	.84	--	.01	.04
AUG 01...	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--
SEP 04...	.9	.5	14	3990	--	3570	5.43	.43	<1	.01	.04
07...	--	--	--	--	--	--	--	--	--	--	--

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN+AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS TOTAL (MG/L AS PO4)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, DITHIO, DIS- SOLVED (MG/L AS PO4)
OCT 27...	.00	.00	.01	.04	.05	.42	.00	.00	.01	.03
NOV 15...	--	--	--	--	--	--	--	--	--	--
DEC 06...	--	--	--	--	--	--	--	--	--	--
JAN 25...	.01	.03	.04	.02	.03	.44	.01	--	.00	.00
FEB 22...	--	--	--	--	--	--	--	--	--	--
MAR 07...	--	--	--	--	--	--	--	--	--	--
APR 27...	.02	.07	.86	.00	.00	.80	.00	.00	.00	.00
MAY 24...	--	--	--	--	--	--	--	--	--	--
JUL 12...	.00	.00	.01	.02	.03	.91	.01	--	.01	.03
AUG 01...	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--
SEP 04...	.00	.00	.01	.02	.03	.54	.02	.06	.01	.03
07...	--	--	--	--	--	--	--	--	--	--

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)
OCT 27...	1430	10	2	0	2200	0	5	2	30
JAN 25...	1530	20	--	--	2300	--	--	--	50
APR 27...	1200	0	1	0	1900	0	10	2	20
JUL 12...	1600	0	--	--	2300	--	--	--	40
SEP 04...	1430	20	3	100	2400	0	10	3	40

TABLE 5.—Continued

09306430 EVACUATION CREEK NEAR WATSON, UTAH—Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 27...	0	130	220	.0	34	0	4200	1.1	20
JAN 25...	--	120	140	--	--	--	3700	--	--
APR 27...	0	10	80	.0	30	2	3600	.0	20
JUL 12...	--	130	40	--	--	--	3600	--	--
SEP 04...	2	140	80	.0	70	0	4300	.0	20

DATE	TIME	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS YT-90)
OCT 27...	1430	<33	<.4	21	1.3	18	1.4
APR 27...	1200	<29	<.4	<11	1.4	<9.9	1.4
SEP 04...	1430	65	<.4	<16	.5	<14	.5

DATE	TIME	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)	CARBON, INOR- GANIC, TOTAL (MG/L AS C)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT 27...	1430	--	9.3	.7	--	2	.10
JAN 25...	1530	7.7	--	--	100	--	--
APR 27...	1200	--	9.0	.4	86	2	.00
SEP 04...	1430	--	11	.5	99	1	.10

TABLE 5.—Continued

09306430 EVACUATION CREEK NEAR WATSON, UTAH—Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	21.0	2.5	9.0	14.0	.5	5.0	3.5	.0	.5			
2	21.5	3.0	9.5	14.0	.5	5.0	8.0	.0	3.0			
3	22.5	6.5	11.5	15.5	.5	5.5	8.0	.5	4.0			
4	22.5	5.0	11.5	15.5	1.5	7.0	11.0	1.5	4.0			
5	21.0	10.0	13.5	14.0	3.0	7.0	7.0	.0	1.0			
6	20.0	9.0	12.5	7.5	4.0	5.5	6.0	.0	1.0			
7	14.5	8.5	11.0	8.0	2.5	5.0	10.0	.0	2.0			
8	15.0	5.0	9.0	5.5	2.5	4.0	6.0	.0	.5			
9	16.5	6.0	9.5	3.5	1.5	2.5	3.0	.0	.0			
10	13.0	6.5	8.5	4.5	1.5	2.5	3.5	.0	.0			
11	15.0	4.0	8.0	4.5	1.5	3.0	2.5	.0	.0			
12	14.5	4.0	8.0	6.5	2.0	3.5	6.5	.0	1.0			
13	15.5	4.0	8.5	5.5	2.0	3.5	4.5	.0	.5			
14	16.0	5.0	9.0	6.0	2.0	4.0	7.5	.0	2.0			
15	16.5	5.5	9.5	11.0	1.5	4.0	7.5	.0	2.5			
16	17.0	5.5	9.5	11.5	.0	3.5	3.5	.0	.5			
17	17.0	5.5	9.5	13.0	.0	4.0	2.0	.0	.0			
18	16.5	5.5	9.5	9.0	2.5	4.5	3.5	.0	.5			
19	15.5	5.0	9.0	4.0	.0	1.0	.0	.0	.0			
20	14.5	7.5	10.0	.5	.0	.0	.0	.0	.0			
21	15.5	8.5	10.5	.0	.0	.0	.0	.0	.0			
22	15.5	6.0	9.5	1.5	.0	.0	.5	.0	.0			
23	15.5	5.0	8.5	4.5	.0	.5	.5	.0	.0			
24	14.0	5.5	8.0	5.5	.0	1.5	2.0	.0	.5			
25	15.5	4.5	8.5	9.0	.0	2.5	3.0	.0	.5			
26	15.5	4.5	8.5	10.5	.0	3.0	2.0	.0	.0			
27	16.5	4.5	8.0	7.5	.0	2.5	1.5	.0	.5			
28	16.5	4.0	8.5	11.5	.0	3.0	2.5	.0	1.0			
29	12.5	5.5	8.5	6.5	.0	2.0	2.5	.5	1.0			
30	16.5	4.0	7.5	8.0	.0	1.5	---	---	---			
31	7.5	2.0	4.5	---	---	---	---	---	---			
MONTH	22.5	2.0	9.0	15.5	.0	3.0	11.0	.0	1.0			

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1				---	---	---	14.0	8.0	10.0	18.0	7.0	11.5
2				---	---	---	13.0	7.5	9.5	23.0	6.5	13.5
3				---	---	---	16.5	3.5	9.0	22.0	8.5	13.0
4				---	---	---	15.0	4.5	9.5	19.0	8.0	11.0
5				---	---	---	17.5	7.0	10.5	15.5	7.5	10.5
6				---	---	---	16.0	7.0	10.5	18.0	6.5	10.0
7				11.0	.5	7.0	15.0	7.5	10.5	20.5	7.0	11.5
8				11.5	.0	4.0	16.0	8.5	10.5	18.0	7.5	11.0
9				12.5	1.5	5.5	13.5	7.0	9.5	21.5	7.0	12.5
10				10.5	2.0	5.0	18.0	6.0	10.5	20.5	8.5	13.0
11				12.5	2.0	6.0	20.0	7.5	11.5	17.0	9.0	12.0
12				10.5	4.0	6.5	19.0	6.5	11.0	21.5	8.0	13.0
13				12.0	4.0	6.0	15.5	8.5	10.5	23.5	8.5	14.0
14				12.5	2.5	5.5	18.5	8.5	11.5	24.0	9.0	14.5
15				14.5	3.0	6.5	17.5	8.0	11.5	22.5	10.0	14.5
16				16.0	3.0	7.0	18.0	7.5	10.0	22.0	9.5	13.5
17				17.5	4.0	8.5	15.5	6.0	9.0	21.0	9.0	12.0
18				17.5	4.5	8.5	19.0	5.5	10.0	22.5	8.0	13.0
19				14.0	5.5	8.5	19.5	6.0	10.5	24.0	8.0	14.0
20				19.0	5.0	9.5	20.0	6.5	11.0	25.0	9.0	15.0
21				19.5	5.0	10.0	11.0	6.0	8.0	18.0	10.5	13.0
22				10.5	6.0	8.5	18.0	5.0	9.5	23.0	9.5	14.0
23				18.5	5.0	9.5	19.0	6.0	11.0	21.0	9.5	13.5
24				14.5	4.5	8.5	21.5	7.0	12.5	21.0	9.0	13.5
25				17.5	2.0	8.5	16.5	9.0	11.5	21.5	8.5	13.0
26				18.0	3.5	9.5	18.5	8.0	12.0	23.5	8.0	13.5
27				18.0	5.0	10.0	18.0	9.0	11.0	24.5	9.0	13.5
28				19.0	6.5	11.0	20.5	8.0	12.0	25.0	9.0	15.0
29				19.0	6.5	10.5	19.5	8.5	11.5	26.0	8.5	15.0
30				18.5	7.0	11.0	22.0	8.0	12.0	24.5	9.5	14.5
31				16.0	7.5	11.0	---	---	---	24.5	9.0	14.0
MONTH				19.5	.0	8.0	22.0	3.5	10.5	26.0	6.5	13.0

TABLE 5.—Continued

09306430 EVACUATION CREEK NEAR WATSON, UTAH—Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	25.0	7.5	14.0	28.0	11.5	18.0	---	---	---	30.0	10.0	18.0
2	25.5	8.0	15.0	27.5	10.0	17.0	---	---	---	31.0	11.5	19.0
3	24.5	9.5	15.0	26.5	10.0	16.0	---	---	---	32.0	12.5	20.0
4	26.0	10.0	15.0	29.0	9.0	17.0	---	---	---	32.5	12.5	20.0
5	22.0	10.5	14.0	29.5	9.5	17.0	---	---	---	30.0	12.5	19.0
6	27.5	9.5	16.5	29.0	11.0	18.0	---	---	---	29.0	13.0	19.0
7	27.0	10.5	16.0	29.0	11.5	18.0	---	---	---	27.0	13.5	19.0
8	28.0	10.0	16.5	29.0	11.5	18.0	---	---	---	29.0	13.0	18.0
9	28.0	10.0	16.5	29.5	12.0	18.5	---	---	---	27.5	11.0	17.0
10	23.5	11.5	16.0	26.5	13.5	18.5	---	---	---	25.5	11.5	16.0
11	27.0	11.0	16.5	25.0	14.5	18.0	---	---	---	24.0	10.0	14.0
12	28.5	9.0	16.5	30.5	12.5	19.0	---	---	---	24.5	7.0	13.0
13	27.0	9.5	16.5	32.5	12.0	20.0	---	---	---	26.0	6.0	13.0
14	24.5	10.0	16.0	33.5	12.5	21.5	---	---	---	22.5	6.5	12.5
15	26.5	9.5	16.0	27.5	15.5	21.0	---	---	---	24.0	9.5	14.5
16	26.0	9.5	16.0	32.0	17.0	22.0	---	---	---	27.5	9.0	15.5
17	27.5	9.5	16.5	---	18.0	---	---	---	---	24.0	11.5	15.5
18	28.5	9.0	16.5	---	17.0	---	---	---	---	20.0	6.5	11.5
19	27.5	10.5	16.5	---	19.0	---	---	---	---	14.5	5.0	8.5
20	29.0	9.5	17.0	---	---	---	---	---	---	21.0	6.0	10.5
21	30.0	10.0	17.5	---	---	---	---	---	---	24.0	2.5	10.0
22	29.5	11.0	18.5	---	---	---	---	---	---	25.5	4.0	11.5
23	28.5	11.5	18.5	---	---	---	28.0	12.0	19.5	27.0	5.5	13.0
24	27.5	14.0	18.5	---	---	---	29.5	9.5	17.0	26.5	6.5	14.0
25	28.0	11.5	17.0	---	---	---	29.0	10.0	17.0	28.5	9.5	16.0
26	29.5	9.5	17.5	---	---	---	30.5	9.5	17.0	27.5	8.0	15.0
27	27.5	10.0	17.0	---	---	---	30.5	8.5	16.5	26.5	7.5	14.5
28	21.5	12.0	16.5	---	---	---	31.0	9.5	17.5	27.0	8.0	15.0
29	25.0	12.5	16.5	---	---	---	30.5	10.0	17.0	27.0	8.0	14.5
30	29.0	11.5	18.5	---	---	---	31.0	9.5	18.0	26.5	6.5	13.5
31	---	---	---	---	---	---	26.5	13.0	17.5	---	---	---
MONTH	30.0	7.5	16.5	33.5	9.0	18.5	31.0	8.5	17.5	32.5	2.5	15.0
YEAR	33.5	.0	10.5									

TABLE 5.—Continued

09306430 EVACUATION CREEK NEAR WATSON, UTAH—Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDEO (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDEO (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM
DEC 16...	1240	.04	.5	153	.02	--	--	--	--	--	--	--
MAR 04...	1700	10	8.0	6860	185	45	60	82	99	92	98	100
17...	1140	.33	3.5	6	<.01	--	--	--	--	--	--	--
MAY 07...	1400	2.9	6.0	1380	11	--	--	--	--	--	--	--
29...	1212	78	8.0	68600	14400	--	--	--	--	--	--	--
JUN 02...	1600	1.7	20.0	743	3.4	86	91	98	100	--	--	--
20...	1445	2.0	13.0	857	4.6	90	94	98	100	--	--	--
SEP 10...	1030	6.9	14.0	80500	1500	50	68	95	99	100	--	--

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDEO (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDEO (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM
OCT 07...	1320	.03	17.5	35	<.01	--	--	--	--
JAN 08...	1230	.03	.5	56	<.01	--	--	--	--
23...	1410	.05	.0	127	.02	--	--	--	--
FEB 10...	1600	45	.0	21000	2550	--	--	--	--
16...	1500	4.8	3.5	9580	124	--	--	--	--
MAR 22...	1500	1.4	10.5	1150	4.3	--	--	--	--
APR 08...	1415	2.1	16.5	1790	10	--	--	--	--
12...	1220	1.2	12.5	872	2.8	--	--	--	--
14...	1400	1.7	12.5	1060	4.9	90	93	98	100

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

1978	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
TOTAL	12020.96	10470.48	0.38	0.31	2.25	217.0	76.95	0.85	0.30	368.29	33106.12	0.00
MAX	12000	10000	.02	.01	1.0	33	17	.10	.01	350	33000	.00
MIN	.02	.00	.01	.01	.00	1.0	.02	.01	.01	.01	.00	.00
WTR YR 1978	TOTAL	56263.89		MAX	33000		MIN	.00				

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDEO (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDEO (T/DAY)
OCT 27...	1540	.06	16.5	121	.02
NOV 15...	1530	.07	11.0	106	.02
JAN 25...	1530	.03	.5	3	<.01
FEB 22...	1020	.05	.0	92	.01
MAR 07...	1530	3.6	11.0	3090	30
APR 27...	1200	.50	12.0	16	.02
SEP 07...	1240	.04	25.0	18	<.01

TABLE 5.—Continued

09306500 WHITE RIVER NEAR WATSON, UTAH

LOCATION.—Lat 39°58'46", long 109°10'41", in SE1/4SW1/4NE1/4 sec.2, T.10 S., R.24 E., Uintah County, Hydrologic Unit 14050007, on right bank 350 ft (110 m) downstream from bridge on State Highway 45, 1 mi (2 km) downstream from Evacuation Creek, and 7 mi (11 km) north of Watson.

DRAINAGE AREA.—4,020 mi² (10,410 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—April 1904 to October 1906 (no winter records), May to November 1918, April 1923 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "near Dragon" 1906 and "near Rangely, Colo." 1904-05, 1918.

GAGE.—Water-stage recorder. Datum of gage is 4,946.78 ft (1,507.779 m) National Geodetic Vertical Datum of 1929. See WSP 1733 for history of changes prior to Oct. 27, 1959.

REMARKS.—Water-discharge record good except those for winter periods, which are fair. Diversions for irrigation of about 31,900 acres (129 km²) above station.

AVERAGE DISCHARGE.—55 years (1924-78), 694 ft³/s (19.65 m³/s), 502,800 acre-ft/yr (620 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.—Maximum daily discharge, 8,160 ft³/s (231 m³/s) July 15, 1929; maximum gage height, 13.1 ft (3.99 m) Feb. 11, 1962, from floodmark in well (backwater from ice); minimum, 11 ft³/s (0.31 m³/s) Dec. 6, 1972, result of freezeup.

EXTREMES FOR CURRENT YEAR.—Peak discharges above base of 2,900 ft³/s (82.1 m³/s) and maximum (*)

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage Height (ft) (m)	
June 17	2000	*3,910	111	6.31	1.923
Sept. 8	1600	3,840	109	6.47	1.972

Minimum discharge, 95 ft³/s (2.69 m³/s) Dec. 22, 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	174	328	311	320	320	369	540	898	2250	2480	433	260
2	161	320	328	300	320	361	600	878	2040	2340	429	264
3	174	307	311	261	320	356	700	848	2110	2140	438	266
4	170	307	315	214	320	349	660	916	2160	1990	419	261
5	161	307	333	236	320	361	590	1040	2270	1790	396	250
6	184	311	328	300	300	384	600	1050	2490	1590	399	233
7	426	421	303	330	300	448	570	990	2230	1450	384	216
8	320	333	259	320	300	456	540	896	2330	1320	374	1530
9	283	320	291	300	340	485	550	844	2340	1220	358	640
10	267	303	295	280	330	487	570	765	2520	1120	356	398
11	251	271	259	290	290	506	570	754	2950	1080	355	334
12	251	283	300	340	320	435	530	778	3390	1170	355	321
13	251	311	300	340	340	415	550	766	3460	1090	435	349
14	275	307	300	340	340	404	570	786	3410	993	431	348
15	267	295	300	280	340	374	570	986	3520	916	420	335
16	263	303	300	300	320	345	600	1520	3630	842	489	342
17	291	303	300	300	300	332	610	2080	3730	801	449	346
18	287	299	303	300	280	327	610	2500	3800	858	398	354
19	283	300	186	300	255	380	580	2020	3580	955	386	371
20	279	270	191	300	212	447	540	1610	3330	846	401	448
21	291	220	135	300	270	556	520	1580	3140	778	402	436
22	299	120	96	300	290	528	542	1840	3050	718	381	437
23	315	210	154	300	290	620	563	1970	3080	679	362	421
24	307	356	168	300	270	690	540	2290	3190	638	345	411
25	299	370	330	300	280	869	524	2680	3250	641	332	390
26	299	380	320	320	301	586	550	2650	3390	573	334	387
27	299	395	310	320	345	476	636	2330	3240	509	331	387
28	295	375	300	320	362	444	804	2370	2800	481	318	369
29	291	356	310	300	---	430	878	2110	2700	452	319	373
30	307	342	325	260	---	460	906	2020	2640	454	312	370
31	320	---	330	320	---	480	---	2160	---	449	278	---
TOTAL	8340	9323	8591	9291	8575	14160	18113	46925	88020	33363	11819	11847
MEAN	269	311	277	300	306	457	604	1514	2934	1076	381	395
MAX	426	421	333	340	362	869	906	2680	3800	2480	489	1530
MIN	161	120	96	214	212	327	520	754	2040	449	278	216
AC-FT	16540	18490	17040	18430	17010	28090	35930	93080	174600	66180	23440	23500
WTR YR 1978	TOTAL	268367	MEAN	735	MAX	3800	MIN	96	AC-FT	532300		

WATER-QUALITY RECORDS

PERIOD OF RECORD.—December 1950 to current year. Miscellaneous sediment data for water years 1975-76 given below were not previously published.

PERIOD OF DAILY RECORD.—

SPECIFIC CONDUCTANCE: December 1950 to current year.

WATER TEMPERATURES: December 1950 to current year.

REMARKS.—Unpublished daily records of specific conductance obtained before water year 1965 were included in the determination of extremes for period of daily record and are available in files of district office. Specific-conductance and water-temperature recorders operated since November 1974 except for winter periods.

EXTREMES FOR PERIOD OF RECORD.—

SPECIFIC CONDUCTANCE: Maximum daily, 4,450 micromhos Aug. 4, 1955; minimum daily, 266 micromhos June 1, 1976.

WATER TEMPERATURES: Maximum recorded, 33.0°C July 15, 1977; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.—

SPECIFIC CONDUCTANCE: Maximum recorded, 1,960 micromhos Aug. 13; minimum daily, 285 micromhos June 21, 1976.

WATER TEMPERATURES: Maximum recorded, 28.0°C July 30; minimum, 0.0°C on many days during winter period.

WATER QUALITY DATA. WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L AS CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT 27...	1100	295	10.0	840	--	9.5	20	320	130	79	30
NOV 23...	1130	209	.0	660	--	--	--	--	--	--	--
DEC 14...	1300	264	.5	820	--	--	--	--	--	--	--
JAN 25...	1330	277	.5	830	E6.2	11.4	29	300	110	73	28
MAR 07...	1405	443	2.0	900	--	--	--	--	--	--	--
APR 25...	1400	520	14.5	720	--	8.0	22	250	80	66	21
JUN 16...	1030	3670	15.0	310	--	--	--	--	--	--	--
JUL 03...	1100	2270	16.0	290	--	--	--	--	--	--	--
20...	1100	830	22.0	550	E6.3	7.4	44	220	69	60	18
AUG 24...	1725	344	23.0	700	--	--	--	--	--	--	--
SEP 04...	1330	255	23.5	700	E6.4	8.3	15	270	110	66	25
07...	0820	214	19.5	750	--	--	--	--	--	--	--

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HC03)	ALKA- LINITY (MG/L AS CAC03)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
OCT 27...	69	32	1.7	2.0	240	200	.2	210	46	.3
NOV 23...	--	--	--	--	--	--	--	--	--	--
DEC 14...	--	--	--	--	--	--	--	--	--	--
JAN 25...	90	40	2.3	2.0	230	190	--	210	46	.3
MAR 07...	--	--	--	--	--	--	--	--	--	--
APR 25...	46	28	1.3	1.8	200	160	.1	130	29	.2
JUN 16...	--	--	--	--	--	--	--	--	--	--
JUL 03...	--	--	--	--	--	--	--	--	--	--
20...	29	22	.8	1.9	190	160	--	99	19	.2
AUG 24...	--	--	--	--	--	--	--	--	--	--
SEP 04...	51	29	1.4	1.9	190	160	.0	160	38	.2
07...	--	--	--	--	--	--	--	--	--	--

E ESTIMATED.

TABLE 5.—Continued

09306500 WHITE RIVER NEAR WATSON, UTAH—Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	BROMIDE OIS- SOLVED (MG/L AS BR)	SILICA, OIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C OIS- SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C OIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, OIS- SOLVED (MG/L)	SOLIDS, OIS- SOLVED (TONS PER AC-FT)	SOLIDS, OIS- SOLVED (TONS PER DAY)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	NITRO- GEN, NITRATE OIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3)
OCT 27...	.1	13	558	560	569	.76	444	230	.01	.04
NOV 23...	--	--	--	--	--	--	--	--	--	--
DEC 14...	--	--	--	--	--	--	--	--	--	--
JAN 25...	--	14	536	--	578	.73	401	--	.08	.35
MAR 07...	--	--	--	--	--	--	--	--	--	--
APR 25...	.1	11	420	430	405	.57	590	280	.06	.27
JUN 16...	--	--	--	--	--	--	--	--	--	--
JUL 03...	--	--	--	--	--	--	--	--	--	--
20...	--	18	337	--	340	.46	762	--	.03	.13
AUG 24...	--	--	--	--	--	--	--	--	--	--
SEP 04...	.3	12	472	--	449	.64	325	21	.01	.04
07...	--	--	--	--	--	--	--	--	--	--

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2)	NITRO- GEN, NO2+NO3 OIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA OIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA OIS- SOLVED (MG/L AS NH4)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS TOTAL (MG/L AS PO4)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)
OCT 27...	.00	.00	.01	.02	.03	.53	.11	.34	.00	.00
NOV 23...	--	--	--	--	--	--	--	--	--	--
DEC 14...	--	--	--	--	--	--	--	--	--	--
JAN 25...	.01	.03	.09	.02	.03	.12	.07	--	.00	.00
MAR 07...	--	--	--	--	--	--	--	--	--	--
APR 25...	.00	.00	.06	.00	.00	.65	.23	.71	.00	.00
JUN 16...	--	--	--	--	--	--	--	--	--	--
JUL 03...	--	--	--	--	--	--	--	--	--	--
20...	.00	.00	.03	.01	.01	.76	.18	--	.01	.03
AUG 24...	--	--	--	--	--	--	--	--	--	--
SEP 04...	.00	.00	.01	.02	.03	.45	.03	.09	.01	.03
07...	--	--	--	--	--	--	--	--	--	--

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC OIS- SOLVED (UG/L AS AS)	BARIUM, OIS- SOLVED (UG/L AS BA)	BORON, OIS- SOLVED (UG/L AS B)	CALCIUM DIS- SOLVED (UG/L AS CO)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)
OCT 27...	1100	20	2	0	70	0	5	2	10
JAN 25...	1330	20	--	--	80	--	--	--	40
APR 25...	1400	0	1	0	50	0	0	0	50
JUL 20...	1100	120	--	--	50	--	--	--	210
SEP 04...	1330	30	2	100	60	0	10	2	20

TABLE 5.—Continued

09306500 WHITE RIVER NEAR WATSON, UTAH—Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, OIS- SOLVED (UG/L AS MO)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 27...	0	20	20	.0	1	0	1000	1.8	8
JAN 25...	--	10	0	--	--	--	1000	--	--
APR 25...	0	8	0	.0	0	1	760	2.0	10
JUL 20...	--	10	20	--	--	--	530	--	--
SEP 04...	5	20	0	.0	2	0	800	.3	10

DATE	TIME	GROSS ALPMA, OIS- SOLVED (UG/L AS U-NAT)	GROSS ALPMA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, OIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/
OCT 27...	1100	7.4	12	2.8	7.7	2.5	6.8
APR 25...	1400	<4.9	17	<1.5	11	<1.3	10
SEP 04...	1330	7.4	1.5	<2.5	1.0	<2.3	1.0

DATE	TIME	CARBON, ORGANIC OIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDEO TOTAL (MG/L AS C)	CARBON, INOR- GANIC, TOTAL (MG/L AS C)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT 27...	1100	3.4	1.0	49	2	.10
JAN 25...	1330	--	--	46	--	--
APR 25...	1400	2.9	2.1	43	4	.00
SEP 04...	1330	5.8	.8	40	2	.10

TABLE 5.—Continued

09306500 WHITE RIVER NEAR WATSON, UTAH—Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C.) WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	890	780	---	550	---	---	---	700
2	---	860	830	---	---	---	---	550	345	---	620	---
3	920	---	---	800	---	800	780	---	---	345	---	---
4	---	790	---	---	---	---	---	---	---	---	630	---
5	940	---	830	---	---	---	790	510	375	345	---	---
6	---	---	---	840	770	840	---	---	---	---	---	---
7	910	760	800	---	---	840	---	---	370	380	650	---
8	---	---	---	---	770	860	---	570	---	---	---	---
9	---	810	810	750	---	---	---	---	360	---	660	---
10	970	---	---	---	770	910	800	630	---	425	---	---
11	---	790	---	780	---	---	---	---	---	---	650	870
12	870	---	770	---	---	---	730	610	370	720	---	---
13	---	---	---	780	790	1020	---	---	---	---	---	800
14	880	800	770	---	---	---	740	---	320	475	720	---
15	---	---	---	---	820	1020	---	550	---	---	---	---
16	---	810	800	790	---	---	---	---	310	---	740	---
17	840	---	---	---	850	990	700	490	---	---	---	---
18	---	790	---	790	---	---	---	---	---	---	690	740
19	820	---	770	---	---	---	660	390	295	---	---	---
20	---	---	---	780	820	960	---	---	---	---	---	740
21	840	880	860	---	---	---	680	---	285	---	690	---
22	---	---	---	---	880	900	---	410	---	---	---	700
23	---	730	980	790	---	---	---	---	290	---	680	---
24	---	---	---	---	800	930	660	380	---	---	---	---
25	---	---	---	800	---	---	---	---	---	---	710	700
26	840	---	---	---	---	---	670	350	285	560	---	---
27	---	---	830	860	760	1040	---	---	---	---	---	690
28	840	810	790	---	---	---	600	---	290	580	---	---
29	---	---	---	---	---	990	---	---	---	---	---	700
30	---	860	790	830	---	---	---	---	305	---	700	---
31	840	---	---	---	---	---	---	345	---	---	---	---
MEAN	876	808	818	799	811	926	721	487	323	479	655	738
WTR YR 1978	MEAN	706	MAX	1040	MIN	285						

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	.5	5.0	---	5.0	---	---	---	17.5
2	---	7.0	.0	---	---	---	---	6.5	13.5	---	24.5	---
3	11.0	---	---	.5	---	5.0	5.5	---	---	17.5	---	---
4	---	9.0	---	---	---	---	---	---	---	---	21.0	---
5	15.5	---	.5	---	---	---	7.0	7.0	14.5	17.5	---	---
6	---	---	---	.5	.5	1.0	---	---	---	---	---	23.5
7	15.5	8.5	.5	---	---	---	7.0	---	14.5	17.5	24.5	---
8	---	---	---	---	.5	1.0	---	10.0	---	---	---	19.0
9	---	4.0	.5	.5	---	---	---	---	14.5	---	24.5	---
10	11.5	---	---	---	.5	1.0	7.5	13.5	---	17.5	---	---
11	---	3.5	---	.5	---	---	---	---	---	---	23.5	16.5
12	10.0	---	.5	---	---	---	9.0	11.0	15.5	16.5	---	15.5
13	---	---	---	.5	.5	1.0	---	---	---	---	---	---
14	10.0	4.5	.5	---	---	---	7.5	---	15.5	20.5	20.0	---
15	---	---	---	---	.5	1.0	---	16.5	---	---	---	---
16	---	5.0	.5	.5	---	---	---	---	15.5	---	20.0	---
17	13.0	---	---	---	.5	1.5	6.5	13.5	---	---	---	---
18	---	3.5	---	.5	---	---	---	---	---	---	16.5	13.5
19	14.5	---	.5	---	---	---	6.5	11.0	15.5	---	---	---
20	---	---	---	.5	.5	3.0	---	---	---	---	---	10.0
21	11.0	.0	.5	---	---	---	5.5	---	15.5	---	21.0	---
22	---	---	---	---	.5	3.0	---	14.5	---	---	---	14.5
23	---	.0	.5	.5	---	---	---	---	16.5	---	22.0	---
24	---	---	---	---	.5	1.5	7.0	12.5	---	---	---	---
25	---	---	---	.5	---	---	---	---	---	---	17.5	17.5
26	11.0	---	---	---	---	---	7.0	11.0	16.5	24.5	---	---
27	---	---	.5	.5	.5	3.0	---	---	---	---	---	17.5
28	10.0	1.5	.5	---	---	---	7.0	---	16.5	23.0	---	---
29	---	---	---	---	---	4.5	---	---	---	---	---	15.5
30	---	.5	.5	.5	---	---	---	---	17.5	---	21.0	---
31	7.0	---	---	---	---	---	---	14.5	---	---	---	---
MEAN	11.5	4.0	.5	.5	.5	2.5	7.0	11.5	15.5	19.5	21.5	16.5
WTR YR 1978	MEAN	9.0	MAX	24.5	MIN	.0						

TABLE 5.—Continued

09306500 WHITE RIVER NEAR WATSON, UTAH—Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) • WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	870	838	852	900	746	853						
2	860	842	852	860	714	777						
3	920	834	851	830	730	764						
4	882	856	871	790	680	730						
5	940	856	870	750	690	730						
6	898	734	840	768	702	745						
7	910	900	920	1160	566	769						
8	980	934	956	744	654	712						
9	976	964	971	810	746	792						
10	970	950	960	806	792	801						
11	950	900	910	792	776	784						
12	900	850	860	816	776	790						
13	884	852	861	800	748	776						
14	880	866	875	800	688	719						
15	886	870	878	788	718	750						
16	886	872	881	810	758	791						
17	872	818	830	810	770	790						
18	856	834	843	790	760	777						
19	834	796	810	806	772	789						
20	830	810	821	818	776	794						
21	840	822	829	880	770	790						
22	842	828	839	---	---	---						
23	842	824	834	---	---	---						
24	836	822	832	---	---	---						
25	836	818	830	---	---	---						
26	840	824	835	---	---	---						
27	---	---	---	---	---	---						
28	---	---	---	---	---	---						
29	---	---	---	---	---	---						
30	876	728	781	---	---	---						
31	840	730	800	---	---	---						
MONTH	980	728	860	1160	566	773						

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
MONTH												

TABLE 5.—Continued

09306500 WHITE RIVER NEAR WATSON, UTAH—Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1							660	650	655	725	700	718
2							664	620	640	728	712	721
3							641	623	631	737	711	725
4							635	617	624	742	700	731
5							633	613	623	738	718	729
6							651	631	640	739	711	724
7							658	638	646	756	714	740
8							650	632	641	1010	744	848
9							662	646	653	1030	880	966
10							675	657	665	880	762	801
11							683	650	672	927	821	874
12							685	669	676	854	830	841
13							1960	673	957	843	800	834
14							1160	720	882	835	815	824
15							806	596	711	820	786	800
16							815	670	724	812	802	808
17							674	656	663	815	797	808
18							690	638	650	815	740	802
19							649	665	677	852	794	811
20							692	676	686	830	740	812
21							717	689	700	821	789	808
22							724	706	715	818	700	805
23							706	518	606	826	800	814
24							729	609	651	833	801	817
25							736	708	719	823	700	809
26							725	703	714	822	796	809
27							721	701	711	836	690	830
28							724	700	711	853	827	839
29							719	693	705	859	700	848
30							722	700	710	878	848	862
31							719	699	710	---	---	---
MONTH							1960	518	689	1030	690	805
YEAR	1960	518	780									

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	15.0	9.0	12.0	6.5	4.5	5.5						
2	15.0	9.0	12.0	7.0	3.5	5.0						
3	16.0	10.5	13.0	6.5	4.0	5.0						
4	16.5	11.0	13.5	9.0	4.5	6.0						
5	17.0	13.5	15.0	8.0	6.0	7.0						
6	17.0	13.5	14.5	7.0	6.0	6.5						
7	15.5	12.0	13.0	8.5	5.0	6.5						
8	12.5	9.5	11.0	7.0	4.5	6.0						
9	12.5	9.0	10.5	4.5	2.5	3.5						
10	11.5	9.0	10.0	---	---	---						
11	11.0	6.5	8.5	---	---	---						
12	10.5	6.5	8.5	---	---	---						
13	11.0	6.5	9.0	---	---	---						
14	11.5	7.5	9.5	---	---	---						
15	12.5	8.0	10.0	---	---	---						
16	12.5	8.5	10.5	---	---	---						
17	13.0	9.5	10.5	---	---	---						
18	11.0	9.5	10.5	---	---	---						
19	14.5	9.5	10.5	---	---	---						
20	11.0	10.0	10.5	---	---	---						
21	11.5	11.0	11.0	---	---	---						
22	11.5	10.5	11.0	---	---	---						
23	11.0	9.5	10.5	---	---	---						
24	10.5	9.5	9.5	---	---	---						
25	9.5	8.5	9.0	---	---	---						
26	11.0	8.5	9.0	---	---	---						
27	10.5	8.5	9.5	---	---	---						
28	10.5	8.0	9.5	---	---	---						
29	10.0	8.5	9.5	---	---	---						
30	10.0	8.0	9.0	---	---	---						
31	8.0	6.5	7.0	---	---	---						
MONTH	17.0	6.5	10.5	9.0	2.5	5.5						

TABLE 5.—Continued

09306500 WHITE RIVER NEAR WATSON, UTAH—Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
MONTH												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	18.5	15.5	17.0	---	---	---	22.0	16.5	19.0
2	---	---	---	18.5	16.0	17.5	---	---	---	22.5	17.5	20.0
3	---	---	---	---	---	---	---	---	---	24.0	18.0	21.0
4	---	---	---	---	---	---	---	---	---	24.0	18.5	21.5
5	---	---	---	---	---	---	---	---	---	24.0	19.0	21.5
6	---	---	---	---	---	---	---	---	---	24.0	19.0	21.5
7	---	---	---	---	---	---	---	---	---	22.5	19.0	20.5
8	---	---	---	---	---	---	---	---	---	19.5	16.0	18.0
9	---	---	---	---	---	---	---	---	---	18.5	15.0	17.0
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	17.0	12.5	15.0
14	---	---	---	24.0	19.5	22.0	21.5	19.0	20.5	15.5	13.0	14.5
15	---	---	---	22.0	20.5	21.5	21.5	16.5	19.0	16.5	13.5	15.0
16	16.0	---	---	22.0	19.5	21.0	21.5	17.5	19.5	---	---	---
17	16.0	14.0	15.0	23.5	19.5	21.5	21.0	16.5	18.5	---	---	---
18	16.0	13.5	15.0	22.5	19.5	21.0	21.0	16.5	18.5	---	---	---
19	16.0	14.0	15.0	23.0	20.0	21.5	21.5	15.5	18.5	---	---	---
20	16.5	14.0	15.5	24.0	20.5	22.5	20.5	17.0	19.0	---	---	---
21	16.5	14.5	15.5	24.5	21.0	22.5	22.0	18.0	20.0	---	---	---
22	17.5	15.0	16.5	24.5	19.5	22.0	22.0	18.5	20.0	---	---	---
23	17.5	16.0	16.5	24.5	19.5	22.0	---	---	---	---	---	---
24	18.0	16.0	17.0	25.0	20.0	22.5	---	---	---	---	---	---
25	18.0	16.0	17.0	26.0	21.0	23.5	22.5	17.5	20.0	---	---	---
26	17.5	15.5	16.5	26.5	21.5	24.0	23.0	17.5	20.0	---	---	---
27	17.0	15.0	16.0	27.0	21.5	24.5	22.0	17.0	19.5	---	---	---
28	16.5	15.5	16.0	26.5	22.5	24.5	22.5	17.0	19.5	---	---	---
29	16.0	15.0	15.5	27.0	23.0	24.5	22.5	17.0	20.0	---	---	---
30	17.5	15.0	16.5	28.0	22.5	25.0	22.5	17.0	19.5	---	---	---
31	---	---	---	24.5	22.5	24.0	21.5	18.0	19.5	---	---	---
MONTH	18.0	13.5	16.0	28.0	15.5	22.0	23.0	15.5	19.5	24.0	12.5	18.5
YEAR	28.0	2.5	15.5									

TABLE 5.—Continued

09306500 WHITE RIVER NEAR WATSON, UTAH—continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SED1- MENT, SUS- PENDE (MG/L)	SED1- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM
NOV							
12...	1100	413	3.0	147	164	20	25
DEC							
03...	1415	236	.5	78	50	28	36
JAN							
06...	1300	292	.0	29	23	--	--
13...	1330	314	.0	36	31	--	--
FEB							
03...	1530	408	.0	110	121	32	35
05...	1610	355	1.0	215	206	29	33
07...	1420	398	.0	159	171	--	--
MAR							
03...	1605	589	.0	1580	2510	33	39
05...	1550	602	.0	686	1120	32	36
07...	1430	623	.5	1860	3130	27	31
APR							
07...	1455	530	6.0	949	1360	55	59
MAY							
05...	1520	545	10.5	420	618	--	--
JUN							
02...	1710	1680	16.5	1890	8570	25	27
09...	1630	3980	14.0	8320	89400	31	40
JUL							
09...	1405	2130	21.0	3250	18700	35	41
17...	1150	1420	19.0	3540	13600	26	45
AUG							
04...	1130	579	20.0	297	464	--	--
SEP							
08...	1530	320	20.0	25	22	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM
NOV						
12...	--	52	61	96	100	--
DEC						
03...	--	88	93	99	100	--
JAN						
06...	--	--	--	--	--	--
13...	--	--	--	--	--	--
FEB						
03...	--	71	80	97	100	--
05...	--	60	77	98	100	--
07...	--	--	--	--	--	--
MAR						
03...	52	73	83	98	100	--
05...	51	88	97	100	--	--
07...	42	77	88	100	--	--
APR						
07...	75	85	88	99	100	--
MAY						
05...	--	--	--	--	--	--
JUN						
02...	35	63	84	95	99	100
09...	61	77	91	98	100	--
JUL						
09...	61	81	90	98	100	--
17...	56	78	92	98	100	--
AUG						
04...	--	--	--	--	--	--
SEP						
08...	--	--	--	--	--	--

TABLE 5.—Continued

09306500 WHITE RIVER NEAR WATSON, UTAH—continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	SFD, SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM
OCT												
06...	1500	416	12.5	80	90	--	--	--	--	--	--	--
NOV												
04...	1500	492	7.5	192	255	--	--	--	--	--	--	--
DEC												
01...	1530	305	.0	179	147	--	--	--	--	--	--	--
JAN												
05...	1530	205	.0	408	226	--	--	--	--	--	--	--
MAR												
03...	1400	800	.0	1860	4020	--	--	--	--	--	--	--
APR												
06...	1600	550	9.0	893	1330	51	57	69	87	92	99	100
MAY												
04...	1500	906	15.5	2430	5940	27	34	49	84	93	100	--
19...	1500	1900	15.5	3820	19600	--	--	--	--	--	--	--

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
NOV					
23...	1330	209	.5	878	495
DEC					
14...	1230	264	.5	456	325
JAN					
25...	1430	277	.5	243	182
MAR					
07...	1415	443	2.0	2350	2810
APR					
25...	1400	520	14.5	754	1060
JUN					
16...	1530	3670	15.0	2100	20800
JUL					
03...	1115	2270	16.0	1260	7720
20...	1300	830	22.0	339	760
AUG					
24...	1930	344	23.5	138	128
SEP					
07...	1100	214	19.5	32	18

TABLE 5.—Continued

09306500 WHITE RIVER NEAR WATSON, UTAH—continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, DIS- CHARGE, SUS- PENDEO (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDEO (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM
OCT												
06...	1500	416	12.5	80	90	--	--	--	--	--	--	--
NOV												
04...	1500	492	7.5	192	255	--	--	--	--	--	--	--
OEC												
01...	1530	305	.0	179	147	--	--	--	--	--	--	--
JAN												
05...	1530	205	.0	408	226	--	--	--	--	--	--	--
MAR												
03...	1400	800	.0	1860	4020	--	--	--	--	--	--	--
APR												
06...	1600	550	9.0	893	1330	51	57	69	87	92	99	100
MAY												
04...	1500	906	15.5	2430	5440	27	34	49	84	93	100	--
19...	1500	1900	15.5	3820	19600	--	--	--	--	--	--	--

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, DIS- CHARGE, SUS- PENDEO (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDEO (T/DAY)
NOV					
23...	1330	209	.5	878	495
OEC					
14...	1230	264	.5	456	325
JAN					
25...	1430	277	.5	243	182
MAR					
07...	1415	443	2.0	2350	2810
APR					
25...	1400	520	14.5	754	1060
JUN					
16...	1530	3670	15.0	2100	20800
JUL					
03...	1115	2270	16.0	1260	7720
20...	1300	830	22.0	339	760
AUG					
24...	1930	344	23.5	138	128
SEP					
07...	1100	214	19.5	32	18

09306610 SOUTHAM CANYON WASH AT MOUTH, NEAR WATSON, UTAH

WATER-QUALITY RECORDS

LOCATION.—Lat 39°56'50", long 109°14'04", in E1/2NW1/4SE1/4 sec.17, T.10 S., R.24 E., Uintah County, Hydrologic Unit 14050007, on right bank 0.1 mi (0.2 km) upstream from mouth and 6.2 mi (10.0 km) northwest of Watson.

DRAINAGE AREA.—8.3 mi² (21.5 km²).

PERIOD OF RECORD.—February 1976 to June 1976 (discontinued). Miscellaneous sediment data for water year 1976 given below were not previously published.

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)
FER					
10...	1645	4.7	.0	10600	135
12...	1530	.20	.0	9080	4.9

09306620 ASPHALT WASH BELOW CENTER FORK, NEAR WATSON, UTAH

WATER-QUALITY RECORDS

LOCATION.—Lat 39°54'42", long 109°15'53", in NW1/4NW1/4NW1/4 sec.31, T.10 S., R.24 E., Uintah County, Hydrologic Unit 14050007, on right bank 3.4 mi (5.5 km) upstream from mouth and 6.0 mi (9.7 km) northwest of Watson.

DRAINAGE AREA.—94.4 mi² (245 km²).

PERIOD OF RECORD.—February 11, 12, 1976. Miscellaneous sediment data for water year 1976 given below were not previously published.

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)
FER					
10...	1810	8.8	.0	18600	442
11...	1245	.35	.0	1010	.95
11...	1630	1.6	.0	1490	6.4
12...	1800	.15	.0	756	.31

09306610 SOUTHAM CANYON WASH AT MOUTH, NEAR WATSON, UTAH

WATER-QUALITY RECORDS

LOCATION.—Lat 39°56'50", long 109°14'04", in E1/2NW1/4SE1/4 sec.17, T.10 S., R.24 E., Uintah County, Hydrologic Unit 14050007, on right bank 0.1 mi (0.2 km) upstream from mouth and 6.2 mi (10.0 km) northwest of Watson.

DRAINAGE AREA.—8.3 mi² (21.5 km²).

PERIOD OF RECORD.—February 1976 to June 1976 (discontinued). Miscellaneous sediment data for water year 1976 given below were not previously published.

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)
FER					
10...	1645	4.7	.0	10600	135
12...	1530	.20	.0	9080	4.9

09306620 ASPHALT WASH BELOW CENTER FORK, NEAR WATSON, UTAH

WATER-QUALITY RECORDS

LOCATION.—Lat 39°54'42", long 109°15'53", in NW1/4NW1/4NW1/4 sec.31, T.10 S., R.24 E., Uintah County, Hydrologic Unit 14050007, on right bank 3.4 mi (5.5 km) upstream from mouth and 6.0 mi (9.7 km) northwest of Watson.

DRAINAGE AREA.—94.4 mi² (245 km²).

PERIOD OF RECORD.—February 11, 12, 1976. Miscellaneous sediment data for water year 1976 given below were not previously published.

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)
FER					
10...	1810	8.8	.0	18600	442
11...	1245	.35	.0	1010	.95
11...	1630	1.6	.0	1490	6.4
12...	1800	.15	.0	756	.31

09306625 ASPHALT WASH NEAR MOUTH, NEAR WATSON, UTAH—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—August 1975 to June 1976. Miscellaneous sediment data for water year 1976 given below were not previously published.

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)
FEB 11...	1740	.80	.0	1960	4.2

TABLE S.—Continued

09306700 WHITE RIVER BELOW ASPHALT WASH, NEAR WATSON, UTAH

WATER-QUALITY RECORDS

LOCATION.—Lat 39°55'55", long 109°17'31", in SW1/4NW1/4SE1/4 sec.23, T.10 S., R.23 E., Uintah County, Hydrologic Unit 14050007, on right bank 1.3 mi (2.1 km) downstream from Asphalt Wash and 7.8 mi (12.6 km) northwest of Watson.

DRAINAGE AREA.—4,130 mi² (10,700 km²), approximately.

PERIOD OF RECORD.—August 1974 to September 1976 (discontinued). Miscellaneous sediment data for water years 1975-76 given below were not previously published.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM
NOV							
13...	1530	416	2.5	112	126	18	23
JAN							
17...	1300	330	.5	232	207	--	--
24...	1155	390	--	155	163	--	--
27...	1310	450	.5	458	554	--	--
29...	1240	400	.0	225	243	--	--
FEB							
03...	1120	410	.5	190	210	--	--
05...	1330	355	.5	172	165	--	--
07...	1115	400	.5	145	157	--	--
10...	1355	420	.5	220	249	--	--
19...	1115	360	.5	187	182	--	--
21...	1115	340	.0	129	118	--	--
24...	1130	310	.0	148	124	--	--
26...	1155	360	.0	206	200	--	--
MAR							
03...	1320	580	1.0	424	664	38	46
07...	1100	640	.0	608	1050	--	--
10...	1235	594	.5	1660	2660	--	--
12...	1220	520	1.0	1680	2360	--	--
17...	1240	560	1.0	1620	2450	--	--
24...	1350	460	4.5	684	850	--	--
APR							
03...	1350	415	3.5	450	504	--	--
04...	1500	382	5.5	326	334	--	--
14...	1255	411	9.0	420	466	--	--
21...	1305	445	11.0	706	848	--	--
MAY							
15...	1545	915	18.0	2370	5860	--	--
19...	1405	2090	--	8700	49100	--	--
22...	1400	2780	10.0	7200	54000	--	--
27...	1405	1770	13.0	3260	15600	--	--
29...	1455	1970	11.0	4260	22700	--	--
JUN							
04...	1620	2360	15.5	3620	23100	20	28
09...	1430	3960	13.0	4520	48300	24	29
12...	1315	2700	12.0	3000	21900	--	--
16...	1230	3340	16.5	3050	27500	--	--
24...	1315	2180	15.0	1890	11100	--	--
27...	1120	2550	13.0	1920	13200	--	--

TABLE 5.—Continued

09306700 WHITE RIVER BELOW ASPHALT WASH, NEAR WATSON, UTAH—Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

				SED. SUSP. FALL DIAM. % FINER THAN	SED. SUSP. FALL DIAM. % FINER THAN	SED. SUSP. FALL DIAM. % FINER THAN	SED. SUSP. FALL DIAM. % FINER THAN	SED. SUSP. FALL DIAM. % FINER THAN	SED. SUSP. FALL DIAM. % FINER THAN	SED. SUSP. FALL DIAM. % FINER THAN	
				.016 MM	.062 MM	.125 MM	.250 MM	.500 MM	1.00 MM		
NOV											
	13...			28	61	72	98	100	--		
JAN											
	17...			--	--	--	--	--	--		
	24...			--	--	--	--	--	--		
	27...			--	--	--	--	--	--		
	29...			--	--	--	--	--	--		
FEB											
	03...			--	--	--	--	--	--		
	05...			--	--	--	--	--	--		
	07...			--	--	--	--	--	--		
	10...			--	--	--	--	--	--		
	19...			--	--	--	--	--	--		
	21...			--	--	--	--	--	--		
	24...			--	--	--	--	--	--		
	26...			--	--	--	--	--	--		
MAR											
	03...			63	82	93	100	--	--		
	07...			--	--	--	--	--	--		
	10...			--	--	--	--	--	--		
	12...			--	--	--	--	--	--		
	17...			--	--	--	--	--	--		
	24...			--	--	--	--	--	--		
APR											
	03...			--	--	--	--	--	--		
	04...			--	--	--	--	--	--		
	14...			--	--	--	--	--	--		
	21...			--	--	--	--	--	--		
MAY											
	15...			--	--	--	--	--	--		
	19...			--	--	--	--	--	--		
	22...			--	--	--	--	--	--		
	27...			--	--	--	--	--	--		
	29...			--	--	--	--	--	--		
JUN											
	04...			47	71	90	97	99	100		
	09...			43	73	90	99	100	--		
	12...			--	--	--	--	--	--		
	16...			--	--	--	--	--	--		
	24...			--	--	--	--	--	--		
	27...			--	--	--	--	--	--		
DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDEO (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDEO (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM
JUL											
	01...	1200	2660	15.0	1890	13600	--	--	--	--	--
	08...	1600	2380	20.0	3060	19700	54	55	78	98	100
	16...	1450	1260	20.0	4670	15900	43	58	78	92	97
	29...	1310	600	22.0	388	629	--	--	--	--	100
AUG											
	07...	1500	486	21.0	246	323	--	--	--	--	--
	14...	1345	439	19.5	4560	5410	--	--	--	--	--
	22...	1430	396	20.0	178	190	--	--	--	--	--
	28...	1325	352	18.0	123	117	--	--	--	--	--
SEP											
	02...	1500	334	20.0	68	61	--	--	--	--	--
	09...	1400	315	20.5	46	39	--	--	--	--	--
	22...	1430	390	--	208	219	--	--	--	--	--

TABLE 5.—Continued

09306700 WHITE RIVER BELOW ASPHALT WASH, NEAR WATSON, UTAH—Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	SED.	SED.	SED.	SED.	SED.	SED.	SED.
						SUSP.	SUSP.	SUSP.	SUSP.	SUSP.	SUSP.	SUSP.
						FALL	FALL	FALL	FALL	FALL	FALL	FALL
						DIAM.	DIAM.	DIAM.	DIAM.	DIAM.	DIAM.	DIAM.
						% FINER	% FINER	% FINER	% FINER	% FINER	% FINER	% FINER
						THAN	THAN	THAN	THAN	THAN	THAN	THAN
						.002 MM	.004 MM	.016 MM	.062 MM	.125 MM	.250 MM	.500 MM
OCT												
09...	1500	43T	9.5	265	313	--	--	--	--	--	--	--
NOV												
03...	1250	501	6.0	355	480	--	--	--	--	--	--	--
DEC												
02...	1300	331	.5	261	233	--	--	--	--	--	--	--
1T...	1340	203	.0	132	72	--	--	--	--	--	--	--
JAN												
15...	1310	2T0	--	136	99	--	--	--	--	--	--	--
30...	1300	300	.0	236	191	--	--	--	--	--	--	--
FEB												
03...	1345	330	.0	154	13T	--	--	--	--	--	--	--
19...	1230	500	.0	653	882	--	--	--	--	--	--	--
MAR												
01...	1305	901	.0	2990	72T0	--	--	--	--	--	--	--
18...	1230	616	3.0	2620	4360	--	--	--	--	--	--	--
25...	1225	556	4.0	2740	4110	--	--	--	--	--	--	--
APR												
02...	1105	395	2.0	598	638	--	--	--	--	--	--	--
06...	1545	460	--	638	T92	--	--	--	--	--	--	--
0T...	1335	490	--	1120	1480	--	--	--	--	--	--	--
08...	1330	500	--	821	1110	--	--	--	--	--	--	--
09...	1330	534	9.0	716	1030	47	53	65	80	90	100	--
MAY												
03...	1445	694	14.5	1040	1950	26	28	38	61	75	96	100
JUN												
09...	1500	1640	1T.5	1540	6820	13	14	20	47	T3	9T	100

TABLE 5.—Continued

09306740 BITTER CREEK ABOVE DICK CANYON, NEAR WATSON, UTAH

LOCATION.—Lat 39°31'04", long 109°04'16", in SE1/4NW1/4NW1/4 sec.13, T.15 S., R.25 E., Uintah County, Hydrologic Unit 14050007 on right bank 1.2 mi (1.9 km) downstream from Colorado-Utah State line, 2.0 mi (3.2 km) upstream from Dick Canyon, and 26 mi (41.8 km) southeast of Watson.

DRAINAGE AREA.—11.7 mi² (30.3 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1974 to September 1978 (discontinued).

GAGE.—Water-stage recorder and concrete control. Altitude of gage is 7,040 ft (2,146 m) from topographic map.

REMARKS.—Records good except those for winter period, which are fair.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 11 ft³/s (0.31 m³/s) Apr. 25, 1975, Aug. 8, 1976; maximum gage height, 4.06 ft (1.237 m) Aug. 8, 1976; no flow Sept. 8–11, 1977, result of irrigation diversion.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 4.1 ft³/s (0.12 m³/s) Mar. 31, gage height, 3.82 ft (1.164 m); minimum, 0.10 ft³/s (0.003 m³/s) Dec. 1, 5, 6, 9, result of freezeup.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.34	.38	.28	.30	.30	.52	2.4	1.4	1.7	1.0	.80	.61
2	.37	.42	.57	.30	.30	.61	2.0	1.6	1.8	.98	.75	.63
3	.37	.46	.57	.33	.35	.61	1.8	1.4	1.8	.96	.69	.62
4	.35	.47	.58	.35	.40	.54	1.7	1.4	1.8	.95	.66	.62
5	.35	.47	.48	.39	.40	.59	1.9	1.4	1.9	.96	.74	.58
6	.44	.55	.25	.40	.45	.56	1.8	1.4	1.8	.96	.70	.58
7	.96	.73	.47	.40	.46	.60	1.9	1.5	1.6	.94	.69	.59
8	.43	.41	.43	.40	.47	.62	1.9	1.4	1.5	.83	.64	.61
9	.40	.21	.27	.40	.45	.60	1.7	1.3	1.5	.84	.67	.60
10	.40	.29	.30	.40	.49	.60	1.4	1.2	1.4	.84	.69	.59
11	.40	.40	.35	.38	.51	.59	1.4	1.3	1.4	.87	.67	.63
12	.43	.49	.35	.35	.53	.62	1.4	1.3	1.4	.83	.73	.66
13	.40	.48	.36	.27	.52	.64	1.4	1.3	1.4	.75	.97	.68
14	.39	.51	.45	.30	.54	.60	1.4	1.3	1.4	.73	.90	.66
15	.38	.51	.48	.35	.52	.58	1.4	1.3	1.3	.75	.84	.68
16	.37	.48	.45	.40	.53	.58	1.4	1.3	1.3	.80	.76	.66
17	.36	.47	.40	.40	.53	.64	1.2	1.5	1.3	.77	.69	.66
18	.36	.51	.35	.40	.52	.69	1.2	1.5	1.2	.76	.67	.89
19	.37	.46	.30	.40	.56	.71	1.7	1.5	1.2	.75	.67	.72
20	.39	.29	.25	.40	.55	.87	2.0	1.6	1.2	.76	.68	.75
21	.43	.30	.25	.40	.55	1.0	1.9	1.9	1.2	.68	.69	.71
22	.42	.42	.30	.35	.56	1.1	1.7	1.9	1.1	.70	.69	.71
23	.40	.49	.40	.30	.57	1.1	1.7	1.8	1.1	.67	.68	.68
24	.40	.54	.45	.24	.56	.97	1.6	1.7	1.1	.69	.67	.66
25	.40	.56	.45	.25	.52	.93	1.5	1.8	1.1	.70	.67	.66
26	.40	.60	.47	.25	.51	1.1	1.5	1.8	1.1	.67	.66	.66
27	.40	.57	.48	.25	.51	1.2	1.7	1.8	1.1	.64	.65	.66
28	.40	.56	.47	.27	.53	1.4	1.5	1.8	1.1	.69	.66	.65
29	.44	.42	.49	.29	---	1.5	1.4	1.8	1.1	.71	.62	.64
30	.51	.35	.50	.30	---	1.6	1.6	1.7	1.1	.70	.63	.64
31	.46	---	.40	.30	---	1.9	---	1.7	---	.70	.63	---
TOTAL	12.92	13.80	12.60	10.52	13.69	26.17	49.1	47.6	41.0	24.58	21.86	19.69
MEAN	.42	.46	.41	.34	.49	.84	1.64	1.54	1.37	.79	.71	.66
MAX	.96	.73	.58	.40	.57	1.9	2.4	1.9	1.9	1.0	.97	.89
MIN	.34	.21	.25	.24	.30	.52	1.2	1.2	1.1	.64	.62	.58
AC-FT	26	27	25	21	27	52	97	94	81	49	43	39

WTR YR 1978 TOTAL 293.53 MEAN .80 MAX 2.4 MIN .21 AC-FT 582

TABLE 5.—Continued

09306740 BITTER CREEK ABOVE DICK CANYON,
NEAR WATSON, UTAH—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—October 1974 to September 1978 (discontinued). Miscellaneous sediment data for water years 1975-76 given below were not previously published.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	OXYGEN, OIS- SOLVED (MG/L)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L)	HARO- NESS (MG/L AS CAC03)	HARO- NESS, NONCAR- BONATE (MG/L AS CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, OIS- SOLVED (MG/L AS MG)
OCT 13...	1430	.43	9.0	740	7.7	9.2	7	360	140	70	44
NOV 11...	1330	.42	2.0	820	--	--	--	--	--	--	--
DEC 13...	1245	.29	2.0	860	--	--	--	--	--	--	--
JAN 13...	1300	.27	2.0	850	--	10.4	--	--	--	--	--
FEB 14...	1240	.49	2.0	730	--	--	--	--	--	--	--
MAR 27...	1100	.96	2.5	690	--	--	--	--	--	--	--
MAY 04...	1100	1.3	9.0	750	--	8.0	18	340	110	71	40
26...	0830	1.8	7.5	620	--	--	--	--	--	--	--
JUN 07...	1100	1.5	15.0	630	--	--	--	--	--	--	--
JUL 18...	1300	.80	18.0	600	--	8.2	36	270	110	50	36
AUG 23...	1540	.70	20.0	760	--	--	--	--	--	--	--
SEP 04...	0830	.62	10.0	640	--	9.0	21	300	100	58	37

DATE	SODIUM, OIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, OIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HC03)	CAR- BONATE (MG/L AS C03)	ALKA- LITY (MG/L AS CAC03)	CARBON DIOXIDE OIS- SOLVED (MG/L AS C02)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, OIS- SOLVED (MG/L AS CL)
OCT 13...	37	18	.9	1.5	270	0	220	8.6	.6	200	3.7
NOV 11...	--	--	--	--	--	--	--	--	--	--	--
DEC 13...	--	--	--	--	--	--	--	--	--	--	--
JAN 13...	--	--	--	--	--	--	--	--	--	--	--
FEB 14...	--	--	--	--	--	--	--	--	--	--	--
MAR 27...	--	--	--	--	--	--	--	--	--	--	--
MAY 04...	30	16	.7	1.1	280	--	230	--	.2	150	3.0
26...	--	--	--	--	--	--	--	--	--	--	--
JUN 07...	--	--	--	--	--	--	--	--	--	--	--
JUL 18...	25	17	.7	.9	200	--	160	--	--	150	2.2
AUG 23...	--	--	--	--	--	--	--	--	--	--	--
SEP 04...	28	17	.7	1.5	240	--	200	--	.0	150	3.8

TABLE 5.—Continued

09306740 BITTER CREEK ABOVE DICK CANYON, NEAR WATSON, UTAH—Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	FLUORIDE, DIS- SOLVED (MG/L AS F)	BROMIDE DIS- SOLVED (MG/L AS BR)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, OIS- SOLVED (TONS PER DAY)	SOLIDS, RESIDUE AT 105 DEG. C SUS- PENDED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3)
OCT 13...	.2	.1	17	504	490	508	.69	.59	5	.05	.22
NOV 11...	--	--	--	--	--	--	--	--	--	--	--
DEC 13...	--	--	--	--	--	--	--	--	--	--	--
JAN 13...	--	--	--	--	--	--	--	--	--	--	--
FEB 14...	--	--	--	--	--	--	--	--	--	--	--
MAR 27...	--	--	--	--	--	--	--	--	--	--	--
MAY 04...	.1	.0	14	440	490	448	.60	1.59	69	.02	.09
26...	--	--	--	--	--	--	--	--	--	--	--
JUN 07...	--	--	--	--	--	--	--	--	--	--	--
JUL 18...	.2	--	18	366	--	382	.50	.79	--	.01	.04
AUG 23...	--	--	--	--	--	--	--	--	--	--	--
SEP 04...	.2	.2	15	432	--	414	.59	.72	137	.03	.13

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS TOTAL (MG/L AS P04)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS P04)
OCT 13...	.00	.00	.05	.03	.04	.12	.01	.03	.00	.00
NOV 11...	--	--	--	--	--	--	--	--	--	--
DEC 13...	--	--	--	--	--	--	--	--	--	--
JAN 13...	--	--	--	--	--	--	--	--	--	--
FEB 14...	--	--	--	--	--	--	--	--	--	--
MAR 27...	--	--	--	--	--	--	--	--	--	--
MAY 04...	.00	.00	.02	.00	.00	.44	.07	.21	.00	.00
26...	--	--	--	--	--	--	--	--	--	--
JUN 07...	--	--	--	--	--	--	--	--	--	--
JUL 18...	.00	.00	.01	.01	.01	.37	.04	--	.01	.03
AUG 23...	--	--	--	--	--	--	--	--	--	--
SEP 04...	.01	.03	.04	.26	.33	.61	.11	.34	.05	.15

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, OIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, OIS- SOLVED (UG/L AS CU)	IRON, OIS- SOLVED (UG/L AS FE)
OCT 13...	1430	10	2	100	30	0	0	1	10
MAY 04...	1100	0	1	0	20	0	0	0	30
JUL 18...	1300	10	--	--	20	--	--	--	30
SEP 04...	0830	50	2	200	20	2	0	4	20

TABLE 5.—Continued

09306740 BITTER CREEK ABOVE DICK CANYON, NEAR WATSON, UTAH—Continued

WATER QUALITY DATA. WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	LEAD, OIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, OIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, OIS- SOLVED (UG/L AS MO)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	STRON- TIUM, OIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 13...	2	20	20	.0	1	1	900	1.1	8
MAY 04...	0	8	0	.0	0	0	910	2.0	10
JUL 18...	--	20	0	--	--	--	730	--	--
SEP 04...	19	20	0	.0	2	0	820	1.5	10

DATE	TIME	GROSS ALPHA, OIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, OIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90)
OCT 13...	1430	<4.2	<.4	1.6	<.4	1.4	<.4
MAY 04...	1100	<4.2	3.8	<1.5	3.1	<1.4	2.9
SEP 04...	0830	<3.3	11	3.1	6.6	2.9	5.6

DATE	TIME	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDEO TOTAL (MG/L AS C)	CARBON, INOR- GANIC, TOTAL (MG/L AS C)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT 13...	1430	3.5	--	52	2	.00
MAY 04...	1100	1.9	--	56	5	.00
SEP 04...	0830	5.9	1.8	48	7	.00

09306740 BITTER CREEK ABOVE DICK CANYON, NEAR WATSON, UTAH—Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM
OCT 15...	1815	.56	7.0	20	.03	--	--	--	--	--	--
NOV 18...	1500	1.1	1.0	59	.18	43	62	94	98	100	--
DEC 13...	1307	.71	.0	38	.07	--	--	--	--	--	--
JAN 14...	1115	.44	.0	44	.05	--	--	--	--	--	--
MAY 30...	1230	9.0	12.0	132	3.2	26	30	72	84	95	100
JUN 18...	1130	6.3	10.0	124	2.1	--	--	--	--	--	--
JUL 22...	1840	3.5	20.0	173	1.6	34	47	92	98	100	--
AUG 20...	1100	2.4	11.5	38	.25	--	--	--	--	--	--
SEP 23...	1340	1.7	10.0	14	.07	--	--	--	--	--	--

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
NOV 17...	1620	.98	.5	81	.21
DEC 18...	1215	1.4	.0	104	.40
JAN 21...	1345	.85	2.0	104	.24
MAY 18...	1155	9.0	10.0	298	7.2
JUL 22...	1700	2.9	21.5	242	1.9
AUG 09...	1930	2.2	18.0	995	5.9

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
DEC , 1977 13...	1340	.30	2.0	158	.13
JAN , 1978 13...	1430	.28	2.0	266	.20
MAY 26...	0930	1.9	7.5	136	.70
AUG 23...	1530	.70	20.0	46	.09

TABLE 5.—Continued

09306760 SWEETWATER CANYON CREEK BELOW SOUTH CANYON,
NEAR WATSON, UTAH

LOCATION.—Lat 39°32'14", long 109°13'21", in NE1/4SW1/4 sec.3, T.15 S., R.24 E., Uintah County, Hydrologic Unit 14050007, on left bank 0.6 mi (1.0 km) downstream from South Canyon, and 24 mi (39 km) southwest of Watson.

DRAINAGE AREA.—22.6 mi² (58.5 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1974 to September 1978 (discontinued).

GAGE.—Water-stage recorder and concrete control. Altitude of gage is 6,810 ft (2,076 m) from topographic map.

REMARKS.—Records good except those for winter period, which are fair.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 68 ft³/s (1.93 m³/s) Aug. 8, 1976, gage height, 2.82 ft (0.860 m), from slope-area measurement of peak flow; minimum, 0.02 ft³/s (0.001 m³/s) Nov. 20, 1977, result of freezeup.EXTREMES FOR CURRENT YEAR.—Maximum discharge, 1.0 ft³/s (0.028 m³/s) Oct. 7, gage-height 1.48 ft (0.451 m); maximum gage height, 2.26 ft (0.689 m) Jan. 24 (result of ice jam); minimum, 0.02 ft³/s (0.001 m³/s) Nov. 20, result of freezeup.DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.42	.35	.30	.32	.39	.33	.52	.41	.33	.32	.33	.31
2	.41	.39	.33	.30	.39	.36	.44	.41	.33	.32	.28	.31
3	.39	.39	.33	.33	.39	.39	.44	.39	.33	.33	.28	.31
4	.39	.40	.33	.33	.39	.41	.43	.39	.33	.33	.28	.33
5	.39	.41	.33	.33	.39	.34	.44	.34	.34	.33	.28	.33
6	.41	.45	.39	.33	.39	.34	.44	.34	.33	.33	.28	.33
7	.45	.42	.39	.33	.39	.38	.45	.36	.33	.33	.28	.33
8	.42	.37	.39	.33	.38	.39	.44	.33	.35	.33	.28	.33
9	.41	.35	.39	.33	.37	.39	.46	.33	.36	.28	.28	.33
10	.40	.33	.39	.36	.37	.39	.41	.33	.36	.28	.28	.33
11	.39	.35	.39	.39	.39	.39	.41	.33	.37	.28	.33	.33
12	.39	.39	.39	.38	.39	.39	.41	.33	.37	.28	.33	.33
13	.39	.37	.39	.39	.38	.39	.40	.33	.37	.28	.39	.33
14	.39	.39	.39	.39	.36	.40	.44	.34	.37	.28	.33	.33
15	.39	.39	.40	.39	.33	.40	.44	.35	.36	.28	.33	.33
16	.41	.35	.38	.49	.31	.45	.44	.36	.37	.28	.33	.33
17	.39	.28	.38	.49	.30	.46	.44	.38	.37	.28	.32	.33
18	.37	.28	.38	.49	.28	.49	.44	.37	.37	.33	.33	.36
19	.38	.28	.37	.49	.28	.49	.44	.31	.37	.33	.32	.33
20	.39	.27	.36	.49	.28	.49	.44	.30	.37	.33	.33	.33
21	.39	.26	.35	.49	.30	.49	.43	.35	.37	.33	.32	.33
22	.35	.26	.39	.47	.30	.51	.40	.31	.37	.33	.32	.33
23	.33	.33	.39	.45	.30	.50	.39	.30	.37	.33	.31	.33
24	.34	.39	.39	.43	.35	.48	.39	.31	.38	.33	.31	.33
25	.33	.39	.40	.38	.39	.44	.39	.31	.38	.33	.31	.33
26	.35	.33	.40	.33	.39	.43	.40	.32	.38	.33	.30	.33
27	.36	.33	.39	.33	.40	.44	.44	.33	.38	.33	.30	.33
28	.37	.33	.44	.43	.36	.44	.40	.32	.33	.33	.30	.33
29	.39	.32	.44	.43	---	.43	.42	.32	.33	.33	.29	.33
30	.38	.31	.44	.41	---	.42	.42	.32	.33	.33	.31	.33
31	.39	---	.40	.39	---	.55	---	.33	---	.33	.31	---
TOTAL	11.96	10.46	11.83	12.22	9.94	13.20	12.89	10.55	10.70	9.76	9.57	9.87
MEAN	.39	.35	.38	.39	.36	.43	.43	.34	.36	.31	.31	.33
MAX	.45	.45	.44	.49	.40	.55	.52	.41	.38	.33	.39	.36
MIN	.33	.26	.30	.30	.28	.33	.39	.30	.33	.28	.28	.31
AC-FT	24	21	23	24	20	26	26	21	21	19	19	20

WTR YR 1978 TOTAL 132.95 MEAN .36 MAX .55 MIN .26 AC-FT 264

09306760 SWEETWATER CANYON CREEK BELOW SOUTH CANYON,
NEAR WATSON, UTAH—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—October 1974 to September 1978 (discontinued). Miscellaneous sediment data for water years 1975-76 given below were not previously published.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN DEMAND, CHEM- ICAL (LDW LEVEL) (MG/L)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT 18...	1000	.38	3.5	1280	7.6	9.6	--	700	440	160	73
NOV 16...	1400	.38	9.0	1400	--	--	--	--	--	--	--
DEC 13...	1015	.37	2.5	1380	--	--	--	--	--	--	--
JAN 12...	1600	.35	2.0	1350	--	9.3	49	690	440	150	76
FEB 14...	1300	.36	9.0	1300	--	--	--	--	--	--	--
MAR 23...	1300	.50	9.5	1400	--	--	--	--	--	--	--
APR 28...	1100	.38	10.5	1450	--	7.8	18	670	420	150	70
MAY 26...	1300	.34	19.0	1380	--	--	--	--	--	--	--
JUN 07...	1400	.33	23.0	1350	--	--	--	--	--	--	--
JUL 18...	1700	.28	22.0	1350	--	7.8	34	660	480	140	74
AUG 16...	1900	.33	13.0	1310	--	--	--	--	--	--	--
SEP 04...	1030	.31	16.0	1350	--	8.5	11	640	410	140	71

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AB- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLORIDE, DIS- SOLVED (MG/L AS CL)
OCT 18...	60	16	1.0	1.4	320	0	262	13	.2	500	11
NOV 16...	--	--	--	--	--	--	--	--	--	--	--
DEC 13...	--	--	--	--	--	--	--	--	--	--	--
JAN 12...	65	17	1.1	1.8	300	--	250	--	--	530	11
FEB 14...	--	--	--	--	--	--	--	--	--	--	--
MAR 23...	--	--	--	--	--	--	--	--	--	--	--
APR 28...	62	17	1.0	1.7	300	--	250	--	.1	500	14
MAY 26...	--	--	--	--	--	--	--	--	--	--	--
JUN 07...	--	--	--	--	--	--	--	--	--	--	--
JUL 18...	62	17	1.1	1.5	220	--	180	--	--	510	18
AUG 16...	--	--	--	--	--	--	--	--	--	--	--
SEP 04...	55	16	.9	1.4	290	--	240	--	.0	490	12

TABLE 5.—Continued

09306760 SWEETWATER CANYON CREEK BELOW SOUTH CANYON, NEAR WATSON, UTAH—Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	FLUORIDE, OIS- SOLVED (MG/L AS F)	BROMIDE OIS- SOLVED (MG/L AS BR)	SILICA, OIS- SOLVED (MG/L AS SI02)	SOLIDS, RESIDUE AT 180 DEG. C OIS- SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C OIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, OIS- SOLVED (MG/L)	SOLIDS, OIS- SOLVED (TONS PER AC-FT)	SOLIDS, OIS- SOLVED (TONS PER DAY)	SOLIDS, RESIDUE AT 105 DEG. C SUS- PENDEO (MG/L)	NITRO- GEN, NITRATE OIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRATE OIS- SOLVED (MG/L AS NO3)
OCT 18...	.1	.2	22	1010	--	988	1.37	1.04	--	--	--
NOV 16...	--	--	--	--	--	--	--	--	--	--	--
DEC 13...	--	--	--	--	--	--	--	--	--	--	--
JAN 12...	.1	--	22	1040	--	1010	1.41	.98	--	.76	3.4
FEB 14...	--	--	--	--	--	--	--	--	--	--	--
MAR 23...	--	--	--	--	--	--	--	--	--	--	--
APR 28...	.1	.2	21	999	1100	972	1.36	1.02	S0	.67	3.0
MAY 26...	--	--	--	--	--	--	--	--	--	--	--
JUN 07...	--	--	--	--	--	--	--	--	--	--	--
JUL 18...	.1	--	24	1000	--	942	1.36	.76	--	.32	1.4
AUG 16...	--	--	--	--	--	--	--	--	--	--	--
SEP 04...	.1	.2	20	974	--	937	1.32	.82	6	.41	1.8

DATE	NITRO- GEN, NITRITE OIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE OIS- SOLVED (MG/L AS NO2)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA OIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA OIS- SOLVED (MG/L AS NH4)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS TOTAL (MG/L AS P04)	PHOS- PHORUS, ORTHO, OIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, OIS- SOLVED (MG/L AS P04)
OCT 18...	--	--	--	--	--	--	--	--	--	--
NOV 16...	--	--	--	--	--	--	--	--	--	--
DEC 13...	--	--	--	--	--	--	--	--	--	--
JAN 12...	.00	.00	.76	.08	.10	.60	.07	--	.02	.06
FEB 14...	--	--	--	--	--	--	--	--	--	--
MAR 23...	--	--	--	--	--	--	--	--	--	--
APR 28...	.00	.00	.67	.00	.00	.74	.06	.18	.03	.09
MAY 26...	--	--	--	--	--	--	--	--	--	--
JUN 07...	--	--	--	--	--	--	--	--	--	--
JUL 18...	.03	.10	.35	.05	.06	.33	.03	--	.01	.03
AUG 16...	--	--	--	--	--	--	--	--	--	--
SEP 04...	.01	.03	.42	.01	.01	.36	.04	.12	.01	.03

DATE	TIME	ALUM- INUM, OIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, OIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM OIS- SOLVED (UG/L AS CO)	CHRO- MIUM, OIS- SOLVED (UG/L AS CR)	COPPER, OIS- SOLVED (UG/L AS CU)	IRON, OIS- SOLVED (UG/L AS FE)
OCT 18...	1000	10	2	300	40	0	8	0	20
JAN 12...	1600	10	--	--	50	--	--	--	60
APR 28...	1100	0	1	0	50	0	0	0	30
JUL 18...	1700	10	--	--	50	--	--	--	80
SEP 04...	1030	10	2	0	50	0	0	0	20

TABLE 5.—Continued

09306760 SWEETWATER CANYON CREEK BELOW SOUTH CANYON, NEAR WATSON, UTAH—Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	LEAD, OIS- SOLVED (UG/L AS PB)	LITHIUM OIS- SOLVED (UG/L AS LI)	MANGA- NESE, OIS- SOLVED (UG/L AS MN)	MERCURY OIS- SOLVED (UG/L AS HG)	MOLYB- OENUM, OIS- SOLVED (UG/L AS MO)	SELE- NIUM, OIS- SOLVED (UG/L AS SE)	STRON- TIUM, OIS- SOLVED (UG/L AS SR)	VANA- DIUM, OIS- SOLVED (UG/L AS V)	ZINC, OIS- SOLVED (UG/L AS ZN)
OCT 18...	2	20	130	.0	1	1	2200	2.7	10
JAN 12...	--	10	90	--	--	--	2200	--	--
APR 28...	0	10	70	.0	0	1	2100	3.0	10
JUL 18...	--	20	10	--	--	--	2100	--	--
SEP 04...	0	20	20	.0	1	1	2100	1.2	20

DATE	TIME	GROSS ALPHA, OIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, OIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, OIS- SOLVED (PCI/L AS YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS YT-90)
APR 28...	1100	<12	1.9	<3.1	2.5	<2.8	2.4
SEP 04...	1030	7.4	<.4	<2.5	<.4	<2.3	<.4

DATE	TIME	CARBON, ORGANIC OIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)	CARBON, INOR- GANIC, TOTAL (MG/L AS C)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
JAN 12...	1600	--	--	58	--	--
APR 28...	1100	1.0	.8	49	0	.10
SEP 04...	1030	2.2	.4	58	2	.10

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDIM- ENT, OIS- SUS- PENDED (MG/L)	SEDIM- ENT, OIS- SUS- PENDED (T/OAY)	SEO. SUSP. FALL DIAM. % FINER THAN .002 MM	SEO. SUSP. FALL DIAM. % FINER THAN .004 MM
NOV 19...	1030	.42	4.0	67	.09	11	12
DEC 09...	1715	.63	2.5	589	1.0	6	8
JAN 15...	1210	.45	4.0	258	.31	10	12
MAR 19...	1400	.43	14.5	31800	37	17	29
APR 25...	1630	.43	15.5	3040	3.5	24	28
MAY 29...	1600	.35	11.0	1080	1.0	13	17
JUN 17...	1810	.34	13.5	236	.22	--	--
JUL 22...	1136	.31	22.0	225	.19	--	--
AUG 20...	1800	.34	13.0	590	.54	--	--
SEP 22...	1900	.29	10.5	168	.13	--	--

TABLE 5.—Continued

09306760 SWEETWATER CANYON CREEK BELOW SOUTH CANYON, NEAR WATSON, UTAH—Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM	SED. SUSP. FALL DIAM. % FINER THAN 2.00 MM
NOV 19...	--	71	92	99	100	--	--
DEC 09...	--	34	47	72	90	94	100
JAN 15...	--	52	68	96	99	100	--
MAR 19...	52	77	88	97	99	99	100
APR 25...	39	55	72	94	100	--	--
MAY 29...	26	35	61	98	100	--	--
JUN 17...	--	--	--	--	--	--	--
JUL 22...	--	--	--	--	--	--	--
AUG 20...	--	--	--	--	--	--	--
SEP 22...	--	--	--	--	--	--	--

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDEO (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDEO (T/DAY)
OCT 22...	1335	.35	--	173	.16
NOV 18...	1030	.28	4.0	79	.06
DEC 18...	1310	.28	4.0	260	.20
MAY 17...	1535	.46	21.5	263	.33
JUL 23...	1700	.36	20.5	62	.06

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDEO (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDEO (T/DAY)
DEC 13...	1030	.39	2.5	236	.25
MAR 23...	1330	.50	9.5	657	.89
APR 28...	1130	.33	10.5	150	.13
JUL 18...	1630	.28	22.0	18	.01

TABLE 5.—Continued

09306780 SWEETWATER CANYON CREEK NEAR MOUTH, NEAR WATSON, UTAH

LOCATION.—Lat 39°39'29", long 109°19'58", in SW1/4SE1/4NW1/4 sec.27, T.13 S., R.23 E., Uintah County, Hydrologic Unit 14050007, on right bank 0.6 mi (1.0 km) upstream from Park Canyon and 18 mi (29 km) southwest of Watson.

DRAINAGE AREA.—124 mi² (321 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1974 to September 1978 (discontinued).

GAGE.—Water-stage recorder. Altitude of gage is 6,000 ft (1,829 m) from topographic map.

REMARKS.—Records fair except those for winter period, which are poor.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 59 ft³/s (1.7 m³/s) July 25, 1976, gage height, 2.70 ft (0.823 m), from slope area measurement of peak flow; no flow most of time.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 3.5 ft³/s (0.10 m³/s) July 11, gage-height, 1.52 ft (0.463 m); no flow most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.35	.29	.08	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.35	.22	.13	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.33	.16	.03	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.30	.13	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.33	.16	.00	.25	.00	.00	.00
6	.00	.00	.00	.00	.00	.35	.20	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.37	.27	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.37	.35	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.20	.39	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.12	.18	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.11	.15	.00	.00	.25	.00	.00
12	.00	.00	.00	.00	.00	.21	.00	.00	.00	.12	.00	.00
13	.00	.00	.00	.00	.00	.06	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.03	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.10	.06	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.14	.08	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.20	.02	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.25	.12	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.27	.04	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.28	.14	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.28	.27	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.28	.42	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.29	.09	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.30	.13	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.35	.11	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.35	.07	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.17	.00	.00	.03	.00	.00	.00
30	.00	.00	.00	.00	---	.12	.01	.00	.05	.00	.00	.00
31	.00	---	.00	.00	---	.30	---	.00	---	.00	.00	---
TOTAL	.00	.00	.00	.00	3.12	5.64	2.51	.24	.33	.37	.00	.00
MEAN	.000	.000	.000	.000	.11	.18	.084	.008	.011	.012	.000	.000
MAX	.00	.00	.00	.00	.35	.42	.39	.13	.25	.25	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	6.2	11	5.0	.5	.7	.7	.00	.00

WTR YR 1978 TOTAL 12.21 MEAN .033 MAX .42 MIN .00 AC-FT 24

NOTE.—NO GAGE-HEIGHT RECORD JAN. 12 TO MAR. 9.

TABLE 5.—Continued

09306780 SWEETWATER CANYON CREEK NEAR MOUTH,
NEAR WATSON, UTAH—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—March 1975 to April 1978 (discontinued). Miscellaneous sediment data for water years 1975-76 given below were not previously published.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDEO (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDEO (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM
MAR 06...	1430	.33	13.0	1360	1.2	43	66	92	96	99	100
APR 15...	1230	.44	10.0	6230	7.4	34	54	74	87	97	100
21...	1420	.29	24.5	3980	3.1	47	70	98	100	--	--

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDEO (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDEO (T/DAY)
JAN 20...	1130	.04	.5	592	.06
FEB 17...	1420	.91	.0	202	.50
APR 21...	1310	.19	21.0	7340	3.8

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDEO (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDEO (T/DAY)
FEB 22...	1800	.28	.0	1180	.89
MAR 08...	1015	.38	7.5	5910	6.1

TABLE 5.—Continued

09306800 BITTER CREEK NEAR BONANZA, UTAH

LOCATION.—Lat 39°45'12", long 109°21'15", in SE1/4SW1/4 sec.21, T.12 S., R.23 E., Uintah County, Hydrologic Unit 14050007, on left bank 150 ft (46 m) upstream from road bridge, 3 mi (5 km) downstream from Sweetwater Canyon Creek, 17 mi (27 km) upstream from mouth, and 18 mi (29 km) southwest of Bonanza.

DRAINAGE AREA.—324 mi² (839 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1970 to current year.

GAGE.—Water-stage recorder. Altitude of gage is 5,570 ft (1,698 m) from topographic map.

REMARKS.—Records fair except those for winter period, which are poor. Small reservoirs on tributaries above station.

AVERAGE DISCHARGE.—8 years, 1.29 ft³/s (0.036 m³/s), 935 acre-ft/yr (1.15 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,660 ft³/s (47.0 m³/s) July 17, 1974, gage height, 13.55 ft (4.130 m) from floodmarks; rating curve extended above 6 ft³/s (0.170 m³/s) on basis of slope-area measurement of peak flow; no flow for many days each year.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 23 ft³/s (0.65 m³/s) July 16, gage height, 5.03 ft (1.533 m); no peak discharge above base of 25 ft³/s (0.71 m³/s); no flow July 30 to Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	.15	.40	.41	.44	.41	.37	.54	.30	.17	.00	.00
2	.11	.18	.40	.41	.44	.41	.37	.54	.30	.10	.00	.00
3	.11	.18	.40	.41	.44	.41	.37	.46	.26	.08	.00	.00
4	.11	.22	.40	.41	.44	.33	.37	.47	.26	.06	.00	.00
5	.11	.22	.40	.41	.44	.41	.37	.50	.30	.05	.00	.00
6	.18	.29	.40	.41	.44	.33	.37	.52	.30	.04	.00	.00
7	.18	.27	.40	.41	.44	.30	.37	.51	.26	.03	.00	.00
8	.15	.33	.40	.41	.44	.30	.41	.45	.22	.03	.00	.00
9	.18	.37	.40	.41	.44	.33	.44	.43	.18	.03	.00	.00
10	.18	.44	.40	.41	.44	.33	.41	.43	.18	.03	.00	.00
11	.15	.44	.40	.42	.45	.33	.41	.43	.15	.03	.00	.00
12	.11	.41	.40	.42	.45	.33	.40	.39	.11	.03	.00	.00
13	.15	.41	.40	.42	.45	.33	.45	.38	.11	.02	.00	.00
14	.11	.48	.40	.42	.45	.33	.46	.38	.11	.02	.00	.00
15	.11	.41	.40	.42	.45	.44	.43	.38	.10	.02	.00	.00
16	.11	.44	.40	.42	.45	.41	.45	.40	.11	2.7	.00	.00
17	.15	.48	.40	.42	.45	.33	.42	.41	.10	1.5	.00	.00
18	.15	.41	.40	.42	.45	.30	.43	.41	.10	.10	.00	.00
19	.15	.40	.40	.42	.46	.37	.42	.35	.10	.10	.00	.00
20	.15	.40	.40	.42	.46	.37	.45	.34	.09	.08	.00	.00
21	.15	.40	.40	.43	.46	.37	.51	.37	.10	.06	.00	.00
22	.11	.40	.40	.43	.46	.44	.50	.39	.08	.04	.00	.00
23	.11	.40	.40	.43	.45	.41	.44	.30	.07	.04	.00	.00
24	.11	.40	.40	.43	.44	.41	.42	.33	.06	.03	.00	.00
25	.11	.40	.40	.43	.44	.41	.45	.30	.06	.03	.00	.00
26	.11	.40	.40	.43	.44	.41	.47	.30	.04	.03	.00	.00
27	.11	.40	.40	.43	.44	.37	.62	.30	.04	.03	.00	.00
28	.11	.40	.40	.43	.44	.37	.52	.30	.03	.02	.00	.00
29	.11	.40	.40	.43	---	.37	.56	.30	.10	.01	.00	.00
30	.15	.40	.40	.43	---	.37	.64	.30	2.7	.00	.00	.00
31	.18	---	.40	.43	---	.37	---	.26	---	.00	.00	---
TOTAL	4.11	10.93	12.40	13.03	12.49	11.40	13.30	12.17	6.92	5.51	.00	.00
MEAN	.13	.36	.40	.42	.45	.37	.44	.39	.23	.18	.000	.000
MAX	.18	.48	.40	.43	.46	.44	.64	.54	2.7	2.7	.00	.00
MIN	.10	.15	.40	.41	.44	.30	.37	.26	.03	.00	.00	.00
AC-FT	8.2	22	25	26	25	23	26	24	14	11	.00	.00
WTR YR 1978 TOTAL	102.26											
MEAN	.28											
MAX	2.7											
MIN	.00											
AC-FT	203											

TABLE 5.—Continued

09306800 BITTER CREEK NEAR BONANZA, UTAH—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—November 1974 to current year. Miscellaneous sediment data for water years 1975-76 given below were not previously published.

PERIOD OF DAILY RECORD.—

SPECIFIC CONDUCTANCE: May 1977 to September 1978 (discontinued).

REMARKS.—Due to equipment problems, only 7 days of daily record are given.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	OXYGEN, OIS- SOLVED (MG/L)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L)	HARO- NESS (MG/L AS CACO3)	HARO- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM OIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, OIS- SOLVED (MG/L AS MG)
OCT 28...	1200	.11	10.5	7200	8.2	9.8	67	3500	3000	390	610
NOV 18...	0800	.40	8.0	6500	--	--	--	--	--	--	--
OEC 07...	1630	.40	1.5	6500	8.0	--	--	--	--	--	--
JAN 26...	1630	.43	.5	9500	--	--	60	3500	2900	380	610
MAR 07...	1900	.40	5.0	9400	--	--	--	--	--	--	--
APR 19...	0900	.38	4.0	7500	--	11.8	100	3600	3100	350	670
MAY 23...	1220	.40	12.0	9500	--	--	--	--	--	--	--
JUN 21...	1300	.11	24.0	8100	--	--	--	--	--	--	--

DATE	SODIUM, OIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, OIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	CARBON DIOXIDE OIS- SOLVED (MG/L AS CO2)	SULFIDE TOTAL (MG/L AS S)	SULFATE OIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, OIS- SOLVED (MG/L AS CL)
OCT 28...	890	36	6.6	10	550	0	450	5.6	.2	4700	72
NOV 18...	--	--	--	--	--	--	--	--	--	--	--
OEC 07...	--	--	--	--	--	--	--	--	--	--	--
JAN 26...	960	38	7.1	10	640	--	530	--	--	4900	80
MAR 07...	--	--	--	--	--	--	--	--	--	--	--
APR 19...	1000	37	7.2	10	630	--	520	--	.0	4800	8.4
MAY 23...	--	--	--	--	--	--	--	--	--	--	--
JUN 21...	--	--	--	--	--	--	--	--	--	--	--

DATE	FLUO- RIDE, OIS- SOLVED (MG/L AS F)	BROMIDE OIS- SOLVED (MG/L AS BR)	SILICA, OIS- SOLVED (MG/L AS SiO2)	SOLIOS, RESIDUE AT 180 DEG. C OIS- SOLVED (MG/L)	SOLIOS, RESIDUE AT 105 DEG. C, DIS- SOLVED (MG/L)	SOLIOS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIOS, OIS- SOLVED (TONS PER AC-FT)	SOLIOS, OIS- SOLVED (TONS PER DAY)	SOLIOS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRATE OIS- SOLVED (MG/L AS NO3)
OCT 28...	1.3	1.0	7.4	7760	8200	6960	10.6	2.30	17	.97	4.3
NOV 18...	--	--	--	--	--	--	--	--	--	--	--
OEC 07...	--	--	--	--	--	--	--	--	--	--	--
JAN 26...	1.3	--	13	8080	--	7280	11.0	9.38	--	1.3	5.7
MAR 07...	--	--	--	--	--	--	--	--	--	--	--
APR 19...	1.3	.6	3.5	8250	8800	7160	11.2	8.46	11	.51	2.3
MAY 23...	--	--	--	--	--	--	--	--	--	--	--
JUN 21...	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.—Continued

09306800 BITTER CREEK NEAR BONANZA, UTAH—Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN,AM- MONIA • ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS TOTAL (MG/L AS PO4)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)
OCT 28...	.01	.03	.98	.05	.06	1.1	.01	.03	.01	.03
NOV 18...	--	--	--	--	--	--	--	--	--	--
DEC 07...	--	--	--	--	--	--	--	--	--	--
JAN 26...	.02	.07	1.3	.06	.08	1.4	.04	--	.00	.00
MAR 07...	--	--	--	--	--	--	--	--	--	--
APR 19...	.03	.10	.54	.00	.00	1.3	.01	.03	.00	.00
MAY 23...	--	--	--	--	--	--	--	--	--	--
JUN 21...	--	--	--	--	--	--	--	--	--	--

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)
OCT 28...	1200	20	6	400	2400	0	25	4	30
JAN 26...	1630	0	--	--	2600	--	--	--	30
APR 19...	0900	30	7	0	270	1	10	3	30

DATE	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 28...	6	250	30	.0	47	0	4200	2.1	20
JAN 26...	--	250	160	--	--	--	4900	--	--
APR 19...	2	250	70	.0	44	0	4900	.0	20

DATE	TIME	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90)
OCT 28...	1200	<83	<.4	29	1.1	26	1.1
APR 19...	0900	<93	<.4	29	.8	26	.9

DATE	TIME	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)	CARBON, INOR- GANIC, TOTAL (MG/L AS C)	PHENOLS TOTAL (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT 28...	1200	22	--	103	2	.20
JAN 26...	1630	--	--	120	--	--
APR 19...	0900	23	.7	--	2	.20

TABLE 5.—Continued

09306800 BITTER CREEK NEAR BONANZA, UTAH—Continued

SPECIFIC CONDUCTANCE (MICROMHDS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1										---	---	---
2										---	---	---
3										---	---	---
4										---	---	---
5										---	---	---
6										---	---	---
7										---	---	---
8										---	---	---
9										---	---	---
10										---	---	---
11										---	---	---
12										---	---	---
13										---	---	---
14										---	---	---
15										---	---	---
16										---	---	---
17										---	---	---
18										---	---	---
19										---	---	---
20										---	---	---
21										---	---	---
22										---	---	---
23										---	---	---
24										7120	5360	6370
25										6980	5800	6380
26										6860	5860	6390
27										6800	6020	6380
28										6720	5860	6340
29										6780	6000	6350
30										6560	5800	6220
31										---	---	---
MONTH										7120	5360	6350

NOTE.—DAILY SPECIFIC-CONDUCTANCE RECORD FOR MAY 24-30 ONLY.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	STREAM- FLOW, INSTAN- TANEDUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SFD. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM
NOV											
21...	1415	.21	1.5	68	.04	--	--	--	--	--	--
DEC											
10...	1300	.20	.0	405	.22	--	--	--	--	--	--
FEB											
18...	1720	.34	4.0	15	.01	--	--	--	--	--	--
MAR											
19...	1529	.62	18.0	48	.08	--	--	--	--	--	--
APR											
15...	1630	2.2	11.5	316	1.9	27	37	79	99	100	--
MAY											
21...	1700	5.3	13.0	438	6.3	23	37	79	97	99	100
JUL											
23...	1400	2.3	25.0	112	.70	--	--	--	--	--	--
AUG											
21...	1400	.03	20.0	156	.01	--	--	--	--	--	--

TABLE 5.—Continued

09306800 BITTER CREEK NEAR BONANZA, UTAH—Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	STREAM- FLDW. INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
OCT 23...	1500	.27	6.0	474	.35
NOV 19...	1330	1.1	3.0	99	.29
JAN 20...	1530	.48	.5	1080	1.4
MAR 17...	1900	4.6	9.0	814	10
MAY 20...	1230	4.9	11.5	124	1.7
JUN 23...	1400	5.4	20.5	521	7.6
JUL 19...	2030	2.8	24.0	108	.82

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLDW. INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
JAN 26...	1630	.43	.5	160	.19
APR 19...	0850	.38	4.0	442	.45

TABLE 5.—Continued

09306850 BITTER CREEK AT MOUTH, NEAR BONANZA, UTAH

LOCATION.—Lat 39°57'56", long 109°24'59", in NE1/4SE1/4NE1/4 sec. 10, T.10 S., R.22 E., Uintah County, Hydrologic Unit 14050007, on left bank 0.6 mi (1.0 km) upstream from mouth and 13 mi (20.9 km) southwest of Bonanza.

DRAINAGE AREA.—398 mi² (1,031 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1974 to current year.

GAGE.—Water-stage recorder and artificial control. Altitude of gage is 4,770 ft (1,454 m) from topographic map.

REMARKS.—Records good.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 117 ft³/s (3.31 m³/s) Aug. 18, 1977, gage height, 2.87 ft (0.875 m), from rating curve extended above 2 ft³/s (0.057 m³/s) on the basis of indirect measurements of peak flow; minimum daily, 0.10 ft³/s (0.003 m³/s) July 2, 1975.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 7.2 ft³/s (0.20 m³/s) Mar. 11, gage height, 2.03 ft (0.619 m), from rating curve extended above 2 ft³/s (0.057 m³/s) on the basis of indirect measurements of peak flow; minimum daily, 0.44 ft³/s (0.012 m³/s) Sept. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.60	.60	.53	.53	.53	.67	.60	.60	.60	.47	.54	.53
2	.67	.60	.53	.60	.53	.67	.60	.60	.60	.47	.53	.55
3	.67	.60	.53	.60	.53	.75	.58	.60	.60	.47	.53	.53
4	.67	.53	.60	.60	.53	.75	.59	.60	.60	.46	.53	.56
5	.67	.60	.53	.53	.53	.75	.60	.60	.60	.47	.53	.56
6	.67	.60	.53	.60	.60	.93	.58	.60	.59	.46	.53	.56
7	.67	.60	.53	.53	.60	1.2	.58	.60	.58	.46	.53	.55
8	.67	.53	.53	.53	.53	1.0	.59	.60	.57	.48	.53	.45
9	.67	.53	.53	.60	.53	.93	.56	.60	.55	.45	.49	.46
10	.67	.67	.53	.60	.53	1.3	.59	.60	.55	.52	.51	.44
11	.67	.67	.53	.53	.53	1.9	.58	.60	.56	.51	.50	.45
12	.67	.53	.53	.53	.53	1.7	.57	.60	.53	.51	.53	.45
13	.67	.53	.53	.53	.53	.74	.60	.60	.56	.53	.58	.46
14	.67	.60	.53	.53	.53	.60	.60	.60	.54	.55	.62	.46
15	.67	.60	.53	.60	.53	.58	.59	.60	.53	.55	.61	.47
16	.60	.60	.53	.53	.53	.58	.60	.60	.53	.53	.58	.46
17	.67	.60	.53	.60	.53	.60	.59	.60	.56	.55	.56	.48
18	.67	.53	.60	.53	.54	.59	.59	.60	.53	.53	.58	.49
19	.67	.53	.53	.53	.53	.59	.60	.60	.52	.53	.59	.52
20	.67	.53	.46	.53	.53	.60	.60	.60	.49	.55	.57	.51
21	.67	.53	.53	.60	.54	.59	.58	.60	.46	.55	.55	.51
22	.67	.53	.53	.60	.56	.60	.58	.60	.48	.51	.54	.53
23	.60	.53	.53	.60	.59	.59	.59	.60	.47	.53	.53	.53
24	.60	.53	.53	.60	.60	.61	.60	.60	.47	.51	.55	.50
25	.60	.53	.53	.60	.67	.59	.64	.60	.48	.54	.55	.51
26	.60	.60	.53	.53	.67	.62	.67	.60	.49	.55	.56	.50
27	.67	.53	.53	.53	.67	.57	.68	.60	.48	.54	.55	.47
28	.67	.60	.53	.53	.67	.58	.60	.60	.52	.55	.54	.49
29	.60	.60	.60	.53	---	.58	.60	.60	.49	.54	.53	.49
30	.53	.60	.60	.53	---	.57	.60	.60	.47	.53	.56	.48
31	.60	---	.60	.53	---	.59	---	.60	---	.55	.53	---
TOTAL	20.07	17.16	16.71	17.34	15.72	23.92	17.93	18.60	16.00	15.95	16.96	14.95
MEAN	.65	.57	.54	.56	.56	.77	.60	.60	.53	.51	.55	.50
MAX	.67	.67	.60	.60	.67	1.9	.68	.60	.60	.55	.62	.56
MIN	.53	.53	.46	.53	.53	.57	.56	.60	.46	.45	.49	.44
AC-FT	40	34	33	34	31	47	36	37	32	32	34	30

WTR YR 1978 TOTAL 211.31 MEAN .58 MAX 1.9 MIN .44 AC-FT 419

09306850 BITTER CREEK AT MOUTH, NEAR BONANZA, UTAH—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—October 1974 to current year. Miscellaneous sediment data for water years 1975-76 given below were not previously published.

PERIOD OF DAILY RECORD.—

SPECIFIC CONDUCTANCE: October 1976 to September 1978 (discontinued).

WATER TEMPERATURES: April to September 1977.

REMARKS.—Water-temperature recorder was not operated during the winter period.

EXTREMES FOR PERIOD OF RECORD.—

SPECIFIC CONDUCTANCE: Maximum recorded (more than 20 percent missing record), 19,000 micromhos Aug. 17, 1977; minimum recorded, 2,150 micromhos July 24, 1977.

WATER TEMPERATURES: Maximum recorded (more than 20 percent missing record), 31.5°C June 25-26, July 26, 1977.

EXTREMES FOR CURRENT YEAR.—

SPECIFIC CONDUCTANCE: Maximum recorded (more than 20 percent missing record), 18,700 micromhos Oct. 5; minimum recorded, 11,400 micromhos Oct. 3.

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	OXYGEN, OIS- SOLVED (MG/L)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L)	HARO- NESS, (MG/L AS CACD3)	HARO- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM OIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, OIS- SOLVED (MG/L AS MG)
OCT 28...	1700	.60	21.0	15500	8.0	8.2	70	3300	2600	290	630
JAN 18...	1600	.50	8.0	>0	8.2	14.4	--	--	--	--	--
FEB 23...	1345	.52	9.0	>0	--	14.0	--	--	--	--	--
APR 19...	1030	.60	18.0	15100	--	11.8	70	3300	3200	290	620
MAY 23...	1815	.57	24.0	15500	--	9.4	--	--	--	--	--
JUL 27...	1500	.60	24.0	14000	--	9.4	75	2700	2100	100	600
AUG 14...	1515	.63	24.0	14000	--	9.4	--	--	--	--	--

DATE	SODIUM, OIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, OIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	CARBON DIOXIDE OIS- SOLVED (MG/L AS CO2)	SULFIDE TOTAL (MG/L AS S)	SULFATE OIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
OCT 28...	3400	69	26	11	840	0	690	13	.0	9700	220
JAN 18...	--	--	--	--	--	--	--	--	--	--	--
FEB 23...	--	--	--	--	--	--	--	--	--	--	--
APR 19...	3500	70	27	12	150	--	120	--	.0	10000	270
MAY 23...	--	--	--	--	--	--	--	--	--	--	--
JUL 27...	4000	76	33	14	780	--	640	--	--	9800	290
AUG 14...	--	--	--	--	--	--	--	--	--	--	--

DATE	FLUO- RIDE, OIS- SOLVED (MG/L AS F)	BROMIDE OIS- SOLVED (MG/L AS BR)	SILICA, OIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C OIS- SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, OIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, OIS- SOLVED (TONS PER DAY)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	NITRO- GEN, NITRATE OIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRATE OIS- SOLVED (MG/L AS NO3)
OCT 28...	.8	2.4	9.8	15500	16000	14700	21.1	25.1	12	4.9	22
JAN 18...	--	--	--	--	--	--	--	--	--	--	--
FEB 23...	--	--	--	--	--	--	--	--	--	--	--
APR 19...	.8	2.3	10	14400	13000	14800	19.6	23.3	5	4.6	20
MAY 23...	--	--	--	--	--	--	--	--	--	--	--
JUL 27...	.8	--	8.8	15700	--	15200	21.4	25.4	--	3.8	17
AUG 14...	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.—Continued

09306850 BITTER CREEK AT MOUTH, NEAR BONANZA, UTAH—Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NITRO- GEN. NITRITE OIS- SOLVED (MG/L AS N)	NITRO- GEN. NITRITE OIS- SOLVED (MG/L AS NO2)	NITRO- GEN. NO2-NO3 OIS- SOLVED (MG/L AS N)	NITRO- GEN. AMMONIA OIS- SOLVED (MG/L AS N)	NITRO- GEN. AMMONIA OIS- SOLVED (MG/L AS NH4)	NITRO- GEN. AM- MONIA OIS- TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS TOTAL (MG/L AS PO4)	PHOS- PHORUS ORTHO, OIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, OIS- SOLVED (MG/L AS PO4)
OCT 28...	.08	.26	5.0	.01	.01	2.0	.02	.06	.01	.03
JAN 18...	--	--	--	--	--	--	--	--	--	--
FEB 23...	--	--	--	--	--	--	--	--	--	--
APR 19...	.09	.30	4.7	.00	.00	1.4	.00	.00	.00	.00
MAY 23...	--	--	--	--	--	--	--	--	--	--
JUL 27...	.08	.26	3.9	.03	.04	2.1	.06	--	.02	.06
AUG 14...	--	--	--	--	--	--	--	--	--	--

DATE	TIME	ALUM- INUM, OIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, OIS- SOLVED (UG/L AS B)	CAESIUM OIS- SOLVED (UG/L AS CS)	CADMIUM, OIS- SOLVED (UG/L AS CD)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, OIS- SOLVED (UG/L AS FE)
OCT 28...	1700	0	2	200	12000	0	15	5	40
APR 19...	1030	30	4	100	12000	1	10	3	30
JUL 27...	1500	30	--	--	13000	--	--	--	70

DATE	TIME	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, OIS- SOLVED (UG/L AS MO)	SELE- NIUM, OIS- SOLVED (UG/L AS SE)	STRON- TIUM, OIS- SOLVED (UG/L AS SR)	VANA- DIUM, OIS- SOLVED (UG/L AS V)	ZINC, OIS- SOLVED (UG/L AS ZN)
OCT 28...		0	220	80	.0	45	7	3600	6.8	30
APR 19...		0	200	110	.0	65	0	3600	7.0	40
JUL 27...		--	220	60	--	--	--	3300	--	--

DATE	TIME	GROSS ALPHA, OIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS YT-90)
OCT 28...	1700	<190	<.4	<47	1.8	<42	1.8
APR 19...	1030	<160	<.4	<42	.8	<38	.9

DATE	TIME	CARBON, ORGANIC OIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)	CARBON, INOR- GANIC, TOTAL (MG/L AS C)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT 28...	1700	26	.4	157	5	.20
APR 19...	1030	22	.9	180	2	.20

TABLE 5.--CONTINUED

09306850 BITTER CREEK AT MOUTH, NEAR BONANZA, UTAH--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA

WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

BENTHIC INVERTEBRATES

DIVISIONS: .CLASS		DIVERSITY INDEX = 1.25		
..ORDER				
...FAMILY				
....GENUS				
.....SPECIES				
DATE	ORGANISM	COMMON NAME	ORGANISM COUNT	SAMPLING METHOD
OCT. 25	.INSECTA			4 SURBER SAMPLES (4 FT ² TOTAL)
	..ODONATA			
	...COENAGRIONIDAE	DAMSELFLIES		
	....ARGIA		
	.....EMMA		4
	..HEMIPTERA			
	...CORIXIDAE	WATER BOATMEN		
	....CORISELLA		
	.....TARASALIS		1
	..TRICHOPTERA	CADDISFLIES		
	...HYDROPSYCHIDAE			
	.....HYDROPSYCHE		1
TOTAL			6	

TABLE 5.--CONTINUED

09306850 BITTER CREEK AT MOUTH, NEAR BONANZA, UTAH--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA

WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

BENTHIC INVERTEBRATES

DIVISIONS: .CLASS

DIVERSITY INDEX = 1.72

..ORDER
 ...FAMILY
GENUS
SPECIES

DATE	ORGANISM	COMMON NAME	ORGANISM COUNT	SAMPLING METHOD
MAY 24	.INSECTA			4 SURBER SAMPLES
	..ODONATA			(4 FT ² TOTAL)
	...COENAGRIONIDAE	DAMSELFLIES		
	....ARGIA			
	.....EMMA		8	
	..DIPTERA			
	...CHIRONOMIDAE	MIDGES		
	....CRICOTOPUS		8	
	...TABANIDAE			
	....TABANUS		2	
	...EPHYDRIDAE			
	....EPHYDRA			
	.....RIPARIA		2	
	TOTAL		20	

TABLE 5.--CONTINUED

09306850 BITTER CREEK AT MOUTH, NEAR BONANZA, UTAH--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA

WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

BENTHIC INVERTEBRATES

DIVISIONS: .CLASS		DIVERSITY INDEX = 1.92		
..ORDER				
...FAMILY				
....GENUS				
.....SPECIES				
DATE	ORGANISM	COMMON NAME	ORGANISM COUNT	SAMPLING METHOD
JULY 27	.INSECTA			4 SURBER SAMPLES (4 FT ² TOTAL)
	..EPHEMEROPTERA	MAYFLIES		
	...HEPTAGENIIDAE			
	....HEPTAGENIA		2
	.ODONATA			
	...COENAGRIONIDAE	DAMSELFLIES		
	....ARGIA		
	.....EMMA		9
	..HEMIPTERA			
	...CORIXIDAE	WATER BOATMEN		
	....CORISELLA		
	.....TARSALIS		1
	..TRICOPTERA	CADDISFLIES		
	...HYDROPSYCHIDAE			
	....HYDROPSYCHE		4
	..DIPTERA			
	...CHIRONOMIDAE	MIDGES		
	....CRICOTOPUS		2
	TOTAL		18	

TABLE 5.—Continued

09306850 BITTER CREEK AT MOUTH, NEAR BONANZA, UTAH—Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	13700	12400	13100	15300	14600	15100						
2	13700	11500	12600	15300	14500	15100						
3	15600	11400	13700	15300	14500	15100						
4	15700	14900	15400	15300	14400	15000						
5	18700	14900	15800	15200	14600	15000						
6	17900	14900	15800	15700	15000	15200						
7	15900	15100	15500	15200	14600	15100						
8	15600	15000	15400	15200	14800	15100						
9	15500	14900	15300	15200	14600	15000						
10	15500	14800	15300	14900	14500	14800						
11	15600	14900	15400	14900	14400	14800						
12	15600	14900	15300	14900	14000	14700						
13	15500	14700	15200	14900	14000	14400						
14	15400	14600	15100	14500	13800	14300						
15	15400	14400	15200	14500	13800	14300						
16	15500	14800	15300	14500	14100	14400						
17	15500	14900	15300	14500	13900	14400						
18	15500	14900	15300	14500	14500	14500						
19	15500	14900	15300	---	---	---						
20	15800	14800	15300	---	---	---						
21	15500	15000	15300	---	---	---						
22	15400	14900	15300	---	---	---						
23	15400	14900	15300	---	---	---						
24	15400	14900	15200	---	---	---						
25	15500	14900	15300	---	---	---						
26	15400	14900	15200	---	---	---						
27	15400	14300	15100	---	---	---						
28	15500	14700	15100	---	---	---						
29	17400	14900	15500	---	---	---						
30	15600	14600	15200	---	---	---						
31	15300	15000	15200	---	---	---						
MONTH	18700	11400	15100	15700	13800	14800						

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1							---	---	---	15300	13900	14600
2							---	---	---	15200	13900	14600
3							---	---	---	15200	13900	14700
4							---	---	---	15200	13900	14800
5							---	---	---	15200	14000	14600
6							---	---	---	15000	14400	14800
7							---	---	---	15100	14200	14700
8							---	---	---	15000	14200	14700
9							---	---	---	15400	14600	15100
10							---	---	---	15300	14600	15000
11							---	---	---	15100	14700	14900
12							---	---	---	15100	13900	14500
13							---	---	---	15100	13800	14700
14							---	---	---	15200	14200	14800
15							---	---	---	15100	14300	14800
16							---	---	---	15100	14300	14900
17							---	---	---	15200	14700	15000
18							---	---	---	15200	14100	14700
19							15300	14000	---	15200	13700	14700
20							15300	13700	14600	15300	14400	14800
21							15200	14100	14800	15500	14800	15200
22							15400	13900	14700	15400	14600	15000
23							15200	13400	14500	15500	14700	15200
24							15100	13100	14300	15500	14900	15300
25							15100	14100	14800	15500	14600	15100
26							15300	14200	14700	15400	14100	14700
27							16400	14500	15200	15600	14300	15000
28							15400	14200	14900	15500	14200	14800
29							15400	14300	14900	15300	14200	14900
30							15500	14200	14900	15500	14000	14900
31							---	---	---	15500	14300	15100
MONTH							16400	13100	14800	15600	13700	14900

TABLE 5.—Continued

09306850 BITTER CREEK AT MOUTH, NEAR BONANZA, UTAH—Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	15700	14300	15000	---	---	---	---	---	---	---	---	---
2	15300	14000	14700	---	---	---	---	---	---	---	---	---
3	15100	14200	14700	---	---	---	---	---	---	---	---	---
4	15200	14600	14900	---	---	---	---	---	---	---	---	---
5	15300	14500	14900	---	---	---	---	---	---	---	---	---
6	15300	14600	15000	---	---	---	---	---	---	---	---	---
7	15500	14300	14900	---	---	---	---	---	---	---	---	---
8	15300	14200	14800	---	---	---	---	---	---	---	---	---
9	15200	13800	14500	---	---	---	---	---	---	---	---	---
10	15000	14000	14500	---	---	---	---	---	---	---	---	---
11	15100	14000	14400	---	---	---	---	---	---	---	---	---
12	15200	14000	14400	---	---	---	---	---	---	---	---	---
13	15100	14100	14600	15500	14800	15200	---	---	---	---	---	---
14	15200	14400	14800	15300	14600	14900	14200	---	---	---	---	---
15	15300	14500	15000	15000	14500	14800	14500	14100	14300	---	---	---
16	15200	14500	14800	14900	14300	14700	14500	14100	14300	---	---	---
17	15300	14400	14800	---	---	---	14400	14100	14200	---	---	---
18	15200	14100	14700	---	---	---	14500	14000	14200	---	---	---
19	15300	14000	14800	---	---	---	---	---	---	---	---	---
20	15400	14800	15100	---	---	---	---	---	---	---	---	---
21	15400	14400	15000	15500	14700	15200	---	---	---	---	---	---
22	15400	14300	15000	15400	14800	15100	---	---	---	---	---	---
23	15600	14800	15200	15400	14400	15000	---	---	---	---	---	---
24	15500	14600	15100	---	---	---	---	---	---	---	---	---
25	15400	14800	15200	---	---	---	---	---	---	---	---	---
26	15500	14500	15100	---	---	---	14700	14500	14600	---	---	---
27	---	---	---	---	---	---	14900	14400	14700	---	---	---
28	---	---	---	---	---	---	14800	14400	14600	---	---	---
29	---	---	---	---	---	---	14700	14400	14600	---	---	---
30	---	---	---	---	---	---	14700	---	---	---	---	---
31	---	---	---	---	---	---	14700	---	---	---	---	---
MONTH	15700	13800	14800	15500	14300	15000	14900	14000	14400	---	---	---
YEAR	18700	11400	14900	---	---	---	---	---	---	---	---	---

TABLE 5.—Continued

09306850 BITTER CREEK AT MOUTH, NEAR BONANZA, UTAH—Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	STREAM- FLOW. INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT. SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE. SUS- PENDE (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM
MAY 22...	1222	2.7	11.5	271	2.0	23	45	88	98	99	100

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	STREAM- FLOW. INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT. SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE. SUS- PENDE (T/DAY)
NOV 20...	1535	.69	9.0	64	.12
JAN 19...	1400	.57	7.5	2480	3.8
FEB 11...	1600	5.6	2.0	1550	23
11...	1700	7.9	--	5240	112
18...	1550	2.2	4.0	5770	34
MAR 18...	1630	.50	13.0	854	1.2
APR 23...	1400	2.4	17.5	772	5.0
JUN 22...	1400	1.7	--	810	3.7
JUL 20...	1530	.31	30.0	152	.13
SEP 08...	1600	.46	25.5	395	.49

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW. INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT. SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE. SUS- PENDE (T/DAY)
FEB • 1978 23...	1300	.53	9.0	44	.06
MAR 09...	1425	1.2	--	1080	3.5
09...	1455	1.6	--	818	3.5
09...	1655	1.6	--	1120	4.8
09...	1750	2.0	--	1130	6.1
APR 19...	1100	.60	18.0	196	.32
AUG 09...	1515	.53	28.0	139	.20
14...	1500	.75	24.0	45	.09

TABLE 5.—Continued

09306870 SAND WASH NEAR OURAY, UTAH

LOCATION.—Lat 39°55'51", long 109°29'45", in NE1/4NW1/4SE1/4 sec.24, T.10 S., R.21 E., Uintah County, Hydrologic Unit 14050007, on right bank 6.4 mi (10.3 km) south of mouth and 14 mi (23 km) southeast of Ouray.

DRAINAGE AREA.—59.7 mi² (155 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1974 to current year.

GAGE.—Water-stage recorder. Altitude of gage is 5,140 ft (1,567 m) from topographic map.

REMARKS.—Records fair.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 27 ft³/s (0.76 m³/s) July 30, 1976, gage height, 2.31 ft (0.704 m); no flow most of time.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 2.2 ft³/s (0.06 m³/s) Oct. 7, gage height, 1.66 ft (0.506 m); no flow most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.09	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.63	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.01	.00	.00	.00	.00	.27	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.37	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.34	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.58	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.50	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.06	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	.79	.00	.00	.00	.00	2.06	.00	.00	.00	.00	.00	.00
MEAN	.025	.000	.000	.000	.000	.066	.000	.000	.000	.000	.000	.000
MAX	.63	.00	.00	.00	.00	.58	.00	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	1.6	.00	.00	.00	.00	4.1	.00	.00	.00	.00	.00	.00
WTR YR 1978	TOTAL 2.85	MEAN .008	MAX .63	MIN .00	AC-FT 5.7							

TABLE 5.—Continued

09306872 SAND WASH NEAR MOUTH, NEAR OURAY, UTAH

LOCATION.—Lat 39°59'27", long 109°29'10", in NE1/4NW1/4SW1/4 sec.31, T.9 S., R.22 E., Uintah County, Hydrologic Unit 14050007, on right bank 3.0 mi (4.8 km) upstream from mouth and 7 mi (11 km) southeast of Ouray.

DRAINAGE AREA.—71.1 mi² (184 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1976 to current year.

GAGE.—Water-stage recorder and artificial control. Altitude of gage is 4,840 ft (1,475 m) from topographic map.

REMARKS.—Records fair.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 137 ft³/s (3.88 m³/s) June 8, 1977, gage height, 2.64 ft (0.805 m), from rating curve extended above 10 ft³/s (0.28 m³/s) on the basis of theoretical computations; no flow most of time.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 38 ft³/s (1.08 m³/s) Mar. 12, gage height, 2.10 ft (0.640 m); maximum gage height, 2.17 ft (0.661 m) Mar. 3 (backwater from snow); no flow most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.30	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.50	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.70	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	3.2	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	4.9	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	3.6	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	2.5	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	5.1	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	8.0	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	9.0	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	2.0	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.06	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.52	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.06	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.52	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	.00	.00	.00	.00	.00	39.98	.52	.52	.00	.00	.00	.00
MEAN	.000	.000	.000	.000	.000	1.29	.017	.017	.000	.000	.000	.000
MAX	.00	.00	.00	.00	.00	9.0	.52	.52	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	79	1.0	1.0	.00	.00	.00	.00

WTR YR 1978 TOTAL 41.02 MEAN .11 MAX 9.0 MIN .00 AC-FT 81

NOTE.—NO GAGE-HEIGHT RECORD JAN. 6 TO MAR. 2.

09306872 SAND WASH NEAR MOUTH, NEAR OURAY, UTAH

WATER-QUALITY RECORDS

PERIOD OF RECORD.—October 1977 to current year.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM
MAR												
09...	1630	5.6	9.0	14400	218	--	--	--	--	--	--	--
10...	1545	10	--	8730	191	42	50	68	89	95	98	100
10...	1610	15	10.5	6920	280	43	52	68	89	95	98	100

TABLE 5.—Continued

09306878 COYOTE WASH NEAR MOUTH, NEAR OURAY, UTAH

LOCATION.—Lat 40°03'15", long 109°28'36", in SW1/4NE1/4NE1/4 sec.7, T.9 S., R.22 E., Uintah County, Hydrologic Unit 14050007, on right bank 0.1 mi (0.2 km) upstream from jeep trail, 1.1 mi (1.8 km) upstream from mouth, and 11 mi (18 km) southeast of Ouray.

DRAINAGE AREA.—228 mi² (591 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1976 to current year.

GAGE.—Water-stage recorder and artificial control. Altitude of gage is 4,700 ft (1,433 m) from topographic map.

REMARKS.—Records good.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 598 ft³/s (16.9 m³/s) July 21, 1977, gage height, 5.65 ft (1.722 m); no flow most days.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 318 ft³/s (9.01 m³/s) Mar. 10, gage height, 4.51 ft (1.375 m); no flow most days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.50	15	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	2.0	1.7	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	10	.00	.00	.00	.00	.00	.00
6	8.7	12	.00	.00	.00	40	.00	.00	.00	.00	.00	.00
7	54	84	.00	.00	.00	91	.00	.00	.00	.00	.00	.00
8	.07	1.9	.00	.00	.00	95	.00	.00	.00	.00	.00	11
9	.00	.00	.00	.00	.00	100	.00	.00	.00	.00	.00	.52
10	.00	.00	.00	.00	.00	123	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	145	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	154	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	80	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	41	.00	.00	.00	.00	7.3	.00
15	.00	.00	.00	.00	.00	27	.00	.00	.00	.00	2.3	.00
16	.00	.00	.00	.00	.00	20	.00	.00	.00	.00	.11	.00
17	.00	.00	.00	.00	.00	15	.00	.00	.00	.00	.01	.00
18	.00	.00	.00	.00	.00	11	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	7.9	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	5.3	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	1.7	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.60	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	2.1	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	6.7	.00	.00	.00	.00	.00	.00
25	.00	2.9	.00	.00	.00	4.9	.00	.00	.00	.00	.00	.00
26	.00	11	.00	.00	.00	.29	.00	.00	.00	.00	.00	.00
27	.00	2.8	.00	.00	.00	.00	2.6	.00	.00	.00	.00	.00
28	.00	.41	.00	.00	.00	.00	.41	.00	.00	.00	.00	.00
29	.00	.06	.00	.00	---	.00	.13	.00	.00	.00	.00	.00
30	1.4	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	64.17	115.07	.00	.00	.00	983.99	60.43	.00	.00	.00	9.72	11.52
MEAN	2.07	3.84	.000	.000	.000	31.7	2.01	.000	.000	.000	.31	.38
MAX	54	84	.00	.00	.00	154	41	.00	.00	.00	7.3	11
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	127	228	.00	.00	.00	1950	120	.00	.00	.00	19	23

WTR YR 1978 TOTAL 1244.90 MEAN 3.41 MAX 154 MIN .00 AC-FT 2470

NOTE.—NO GAGE-HEIGHT RECORD JAN. 15 TO MAR. 2, MAR. 14 TO JULY 13.

WATER-QUALITY RECORDS

PERIOD OF RECORD.—March 1977 to current year.

PERIOD OF DAILY RECORD.—

SUSPENDED-SEDIMENT DISCHARGE: October 1976 to current year. Although only monthly summary is given, daily values are available in the files.

REMARKS.—Sediment loads computed based on sediment-rating curves.

EXTREMES FOR PERIOD OF DAILY RECORD.—

SEDIMENT LOADS: Maximum daily, 58,000 tons (52,600 tonnes) July 21, 1977; 0 tons many days.

EXTREMES FOR CURRENT YEAR.—

SEDIMENT LOADS: Maximum daily, 48,300 tons (43,800 tonnes) Nov. 7; 0 tons many days.

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

1978	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
TOTAL	32461.40	58209.40	0.00	0.00	0.00	57802.20	10083.50	0.00	0.00	0.00	2214.60	2981.00
MAX	28200	48300	.00	.00	.00	9990	7960	.00	.00	.00	1910	2940
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
WTR YR 1978	TOTAL	163752.10		MAX	48300		MIN	.00				

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978.

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDEO (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDEO (T/DAY)
MAR 10...	1845	301	--	36500	29700
SEP 08...	1345	26	24.0	80000	5620

TABLE S.—Continued

09306885 COTTONWOOD WASH AT MOUTH, NEAR OURAY, UTAH

LOCATION.—Lot 40°03'22", long 109°36'30", in NW1/4NE1/4NE1/4 sec.12, T.9 S., R.20 E., Uintah County, Hydrologic Unit 14050007, on left bank 0.9 mi (1.4 km) upstream from mouth and 4.1 mi (6.6 km) southeast of Ouray.

DRAINAGE AREA.—70.6 mi² (183 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1976 to current year.

GAGE.—Water-stage recorder and artificial control. Altitude of gage is 4,680 ft (1,426 m) from topographic map.

REMARKS.—Records poor.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 286 ft³/s (8.10 m³/s) July 24, 1977, gage-height, 3.07 ft (0.936 m), based on computation of flow over weir; no flow most of time.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 62 ft³/s (1.76 m³/s) Mar. 7, gage height, 2.24 ft (0.683 m), from rating curve based on computation of flow over weir; no flow most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	8.1	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	7.4	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	4.0	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	3.0	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	2.0	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	1.0	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	.00	.00	.00	.00	.00	25.50	.00	.00	.00	.00	.00	.00
MEAN	.000	.000	.000	.000	.000	.82	.000	.000	.000	.000	.000	.000
MAX	.00	.00	.00	.00	.00	8.1	.00	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	51	.00	.00	.00	.00	.00	.00

WTR YR 1978 TOTAL 25.50 MEAN .070 MAX 8.1 MIN .00 AC-FT 51

NOTE.—NO GAGE-HEIGHT RECORD NOV. 21 TO JAN. 18, MAR. 10 TO AUG. 17.

09306885 COTTONWOOD WASH AT MOUTH, NEAR OURAY, UTAH—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—July 1977 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHDS)	HARO- NESS (MG/L AS CACO3)	HARO- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, OIS- SOLVED (MG/L AS MG)	SODIUM, OIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, OIS- SOLVED (MG/L AS K)
MAR 09...	1320	3.0	10.5	290	16	0	5.3	.7	73	90	7.9	1.7

	BICAR- BONATE (MG/L AS HCO3)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLD- RIDE, DIS- SOLVED (MG/L AS CL)	FLUD- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, OIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHO, OIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, OIS- SOLVED (MG/L AS PO4)
MAR 09...	150	120	22	7.6	.5	7.6	200	.27	1.66	1.4	.07	.21

DATE	TIME	BORON, OIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
MAR 09...	1320	250	520	30

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM
MAR 09...	1330	3.1	10.5	2630	22	76	81	86	95	99	100

TABLE 5.—Continued

09306900 WHITE RIVER AT MOUTH NEAR OURAY, UTAH

LOCATION.—Lat 40°03'54", long 109°38'06", in SE1/4SE1/4NW1/4 sec.2, T.9 S., R.20 E., Uintah County, Hydrologic Unit 14050007, Uintah and Ouray Indian Reservation, on left bank 2.8 mi (4.5 km) southeast of Ouray and 3.9 mi (6.3 km) upstream from mouth.

DRAINAGE AREA.—5,120 mi² (13,260 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—April 1974 to current year.

GAGE.—Water-stage recorder. Altitude of gage is 4,655 ft (1,419 m) from topographic map.

REMARKS.—Water-discharge records good except those for winter periods and those for period of no gage-height record, which are fair. Diversions for irrigation of about 37,800 acres (153 km²) above station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 4,080 ft³/s (116 m³/s) June 19, 1978, gage height, 7.94 ft (2.420 m); minimum, 1.6 ft³/s (0.045 m³/s) July 18, 1977.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 4,080 ft³/s (116 m³/s) June 19, gage height, 7.94 ft (2.420 m); minimum, 151 ft³/s (4.28 m³/s) Oct. 6, 7, but may have been less during periods of ice effect.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	175	321	350	300	330	380	493	960	2070	2420	380	259
2	172	344	323	300	330	400	577	950	2120	2410	375	245
3	159	327	332	300	330	390	753	940	2050	2270	365	246
4	164	311	311	300	330	380	766	940	2060	2220	360	242
5	162	306	316	270	330	400	706	1080	2100	1940	355	239
6	156	306	325	280	330	430	622	1150	2200	1710	350	226
7	255	448	325	340	330	490	662	1130	2300	1550	330	212
8	488	486	326	340	330	550	606	1100	2150	1400	320	208
9	377	326	300	340	330	510	543	960	2300	1300	310	1330
10	303	303	280	330	330	600	585	880	2250	1150	292	678
11	273	279	280	300	330	700	631	830	2400	1080	293	402
12	240	250	290	310	330	800	608	800	2800	1050	282	383
13	240	259	310	340	330	740	557	800	3400	1120	306	343
14	240	296	320	340	330	660	572	800	3470	1070	409	360
15	273	292	320	340	330	520	612	900	3490	970	411	360
16	279	286	320	320	330	430	617	1080	3650	880	372	355
17	279	294	320	320	330	370	626	1880	3760	800	463	340
18	285	304	320	320	310	313	650	2060	3960	760	434	335
19	285	304	320	320	300	314	657	2230	3970	810	378	347
20	280	330	250	320	280	396	619	2100	3630	820	364	399
21	280	330	170	320	270	495	574	1880	3370	760	376	469
22	285	250	160	310	270	615	545	1850	3080	680	375	457
23	296	200	160	310	270	581	577	1930	2950	620	353	452
24	317	300	160	310	280	742	589	1970	2970	600	329	438
25	296	350	170	310	290	825	569	2100	3030	570	308	440
26	282	380	360	310	300	902	560	2310	3060	530	301	426
27	279	412	340	310	340	582	600	2550	3120	500	298	417
28	282	433	320	330	360	481	740	2300	2950	470	297	407
29	289	400	300	330	---	460	830	2300	2700	450	291	389
30	294	380	300	330	---	450	900	2050	2530	430	293	394
31	305	---	300	330	---	468	---	2030	---	400	288	---
TOTAL	8290	9807	8978	9830	8880	16374	18946	46840	85890	33740	10658	11798
MEAN	267	327	290	317	317	528	632	1511	2863	1088	344	393
MAX	488	486	360	340	360	902	900	2550	3970	2420	463	1330
MIN	156	200	160	270	270	313	493	800	2050	400	282	208
AC-FT	16440	19450	17810	19500	17610	32480	37580	92910	170400	66920	21140	23400
WTR YR 1978	TOTAL	270031	MEAN	740	MAX	3970	MIN	156	AC-FT	535600		

NOTE.—NO GAGE-HEIGHT RECORD JAN. 4 TO MAR. 16.

WATER-QUALITY RECORDS

LOCATION.—Daily sediment samples collected at bridge 3.4 mi (5.5 km) downstream from gaging station and by U.S. P.S. 69 pumping sediment sampler at gaging station since March 1977.

PERIOD OF RECORD.—February 1974 to current year. Miscellaneous sediment data for water years 1975-76 given below were not previously published.

PERIOD OF DAILY RECORD.—

SPECIFIC CONDUCTANCE: October 1976 to current year.

WATER TEMPERATURES: April 1977 to current year.

SUSPENDED-SEDIMENT DISCHARGE: October 1974 to current year.

REMARKS.—Specific-conductance and water-temperature recorders were not operated during the winter period.

EXTREMES FOR PERIOD OF DAILY RECORD.—

SPECIFIC CONDUCTANCE: Maximum recorded (more than 20 percent missing record), 1,900 micromhos July 6, 1977; minimum daily, 380 micromhos June 16, 1978.

WATER TEMPERATURES: Maximum recorded (more than 20 percent missing record), 32.0°C July 15, 1977; minimum, 0.0°C on many days during winter periods.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 39,600 mg/L July 7, 1977; minimum daily mean, 20 mg/L Jan. 8, 1976.

SEDIMENT LOADS: Maximum daily, 174,000 tons (158,000 tonnes) Sept. 9, 1978; minimum daily, 0.69 ton (0.63 tonne) July 2, 1977.

EXTREMES FOR CURRENT YEAR.—

SPECIFIC CONDUCTANCE: Maximum recorded (more than 20 percent missing record), 1,740 micromhos Aug. 15; minimum daily, 380 micromhos June 16.

WATER TEMPERATURES: Maximum recorded (more than 20% missing record), 28.0°C July 30, Aug. 7, 8, 11; minimum, 0.0°C on many days during winter period.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 39,500 mg/L Sept. 9; minimum daily mean, 190 mg/L Dec. 24.

SEDIMENT LOADS: Maximum daily, 174,000 tons (158,000 tonnes) Sept. 9; minimum daily, 82 tons (74 tonnes) Dec. 24.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHDS)	PH (UNITS)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	COLI- FORM, TOTAL, IMMED. (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)
OCT										
06...	1600	159	18.0	1030	8.1	7.5	35	--	350	130
NOV										
08...	1130	486	6.0	850	--	--	--	--	--	--
29...	1700	402	2.0	880	8.3	10.6	--	72	K100	70
DEC										
05...	1640	335	6.0	800	--	--	--	--	--	--
JAN										
03...	1300	300	.0	880	8.2	--	49	--	310	120
12...	1000	310	.0	880	8.4	11.0	--	13	K18	88
19...	1500	324	.0	850	--	--	--	--	--	--
FEB										
01...	1830	330	.0	970	8.3	10.5	--	9	K2	110
22...	1600	270	.0	820	--	--	--	--	--	--
MAR										
18...	1300	322	9.0	1090	8.4	9.4	--	30	K10	86
30...	1015	457	13.0	1250	--	--	--	--	--	--
APR										
25...	1300	575	14.0	690	--	8.4	29	--	250	81
MAY										
04...	1700	940	13.5	570	7.9	8.2	--	68	K280	53
09...	1115	889	11.5	540	--	--	--	--	--	--
JUN										
16...	1600	3620	18.0	380	8.1	6.6	--	41	860	28
JUL										
10...	1500	1410	23.0	450	8.0	6.9	--	34	3100	56
27...	1030	500	22.0	680	7.4	9.6	--	--	320	150
AUG										
16...	1500	362	21.0	760	8.3	6.6	--	88	880	92
SEP										
04...	2200	242	24.0	800	--	7.7	21	--	270	100

K RESULTS BASED ON COLONY COUNT OUTSIDE THE ACCEPTABLE RANGE (NON-IDEAL COLONY COUNT).

TABLE 5.—Continued

09306900 WHITE RIVER AT MOUTH, NEAR OURAY, UTAH—Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFIDE TOTAL (MG/L AS S)
OCT 06...	72	40	120	43	2.8	2.5	260	0	210	3.3	.6
NOV 08...	--	--	--	--	--	--	--	--	--	--	--
29...	77	30	80	35	2.0	2.0	300	0	250	2.4	.1
DEC 05...	--	--	--	--	--	--	--	--	--	--	--
JAN 03...	77	29	85	37	2.1	2.0	240	0	200	2.4	--
12...	73	28	79	36	2.0	1.9	250	3	210	1.6	.0
19...	--	--	--	--	--	--	--	--	--	--	--
FEB 01...	81	32	96	38	2.3	2.0	270	0	220	2.2	.0
22...	--	--	--	--	--	--	--	--	--	--	--
MAR 18...	81	36	110	40	2.6	2.7	290	16	260	2.1	.1
30...	--	--	--	--	--	--	--	--	--	--	--
APR 25...	63	23	54	32	1.5	2.0	210	--	170	--	.0
MAY 04...	49	19	46	33	1.4	1.4	180	0	150	3.6	.1
09...	--	--	--	--	--	--	--	--	--	--	--
JUN 16...	49	4.8	21	24	.8	1.5	140	0	110	1.8	.2
JUL 10...	47	15	23	22	.7	1.6	150	0	120	2.4	.2
27...	65	39	170	53	4.1	2.4	210	0	170	13	--
AUG 16...	68	25	66	34	1.7	2.4	220	0	180	1.8	.2
SEP 04...	64	26	62	33	1.7	2.1	200	--	160	--	.2

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLORIDE, DIS- SOLVED (MG/L AS CL)	FLUORIDE, DIS- SOLVED (MG/L AS F)	BROMIDE DIS- SOLVED (MG/L AS BR)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)
OCT 06...	290	61	.4	.2	12	735	730	728	1.00	316
NOV 08...	--	--	--	--	--	--	--	--	--	--
29...	210	32	.3	--	13	558	--	542	.76	606
DEC 05...	--	--	--	--	--	--	--	--	--	--
JAN 03...	220	45	.3	--	14	590	--	593	.80	478
12...	200	48	.3	--	16	568	--	573	.77	475
19...	--	--	--	--	--	--	--	--	--	--
FEB 01...	230	54	.3	--	15	640	--	644	.87	570
22...	--	--	--	--	--	--	--	--	--	--
MAR 18...	230	58	.4	--	12	683	--	689	.93	594
30...	--	--	--	--	--	--	--	--	--	--
APR 25...	140	29	.2	.1	12	444	460	428	.60	689
MAY 04...	130	20	.2	--	12	364	--	367	.50	924
09...	--	--	--	--	--	--	--	--	--	--
JUN 16...	56	12	.2	--	12	211	--	226	.29	2060
JUL 10...	75	14	.2	--	13	268	--	263	.36	1020
27...	130	29	.3	--	15	434	--	555	.59	586
AUG 16...	190	35	.4	--	15	509	--	510	.69	497
SEP 04...	180	39	.3	.1	12	497	--	486	.68	325

TABLE 5.—Continued

09306900 WHITE RIVER AT MOUTH, NEAR OURAY, UTAH—Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SOLIDS, RESIDUE AT 105 DEG. C. SUS- PENDED (MG/L)	SOLIDS, SUSP. TOTAL, RESIDUE AT 110 DEG. C (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
OCT										
06...	330	--	.02	.09	.00	.00	--	.02	--	.01
NOV										
08...	--	--	--	--	--	--	--	--	--	--
29...	--	1020	--	--	--	--	.10	--	.09	--
DEC										
05...	--	--	--	--	--	--	--	--	--	--
JAN										
03...	--	--	.16	.71	.00	.00	--	.16	--	.07
12...	--	110	--	--	--	--	.19	--	.08	--
19...	--	--	--	--	--	--	--	--	--	--
FEB										
01...	--	119	--	--	--	--	.14	--	.06	--
22...	--	--	--	--	--	--	--	--	--	--
MAR										
18...	--	596	--	--	--	--	.12	--	.03	--
30...	--	--	--	--	--	--	--	--	--	--
APR										
25...	450	--	.10	.44	.00	.00	--	.10	--	.00
MAY										
04...	--	1450	--	--	--	--	.21	--	.05	--
09...	--	--	--	--	--	--	--	--	--	--
JUN										
16...	--	1720	--	--	--	--	.21	--	.01	--
JUL										
10...	--	442	--	--	--	--	.06	--	.03	--
27...	--	--	.01	.04	.00	.00	--	.01	--	.00
AUG										
16...	--	1980	--	--	--	--	.06	--	.02	--
SEP										
04...	76	--	.02	.09	.00	.00	--	.02	--	.02

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS NO3)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, TOTAL (MG/L AS PO4)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)
OCT										
06...	.01	--	.81	--	--	.24	.74	--	.00	.00
NOV										
08...	--	--	--	--	--	--	--	--	--	--
29...	--	1.4	1.5	1.6	7.1	.71	--	.04	--	--
DEC										
05...	--	--	--	--	--	--	--	--	--	--
JAN										
03...	.09	--	.61	--	--	.10	--	--	.01	.03
12...	--	.33	.41	.60	2.7	.11	--	.03	--	--
19...	--	--	--	--	--	--	--	--	--	--
FEB										
01...	--	.34	.40	.54	2.4	.12	--	.05	--	--
22...	--	--	--	--	--	--	--	--	--	--
MAR										
18...	--	.77	.80	.92	4.1	.55	--	.02	--	--
30...	--	--	--	--	--	--	--	--	--	--
APR										
25...	.00	--	.98	--	--	.41	1.3	--	.00	.00
MAY										
04...	--	.86	.91	1.1	5.0	1.4	--	.02	--	--
09...	--	--	--	--	--	--	--	--	--	--
JUN										
16...	--	3.0	3.0	3.2	14	1.4	--	.06	--	--
JUL										
10...	--	.97	1.0	1.1	4.7	.38	--	.02	--	--
27...	.00	--	--	--	--	.10	--	--	.04	.12
AUG										
16...	--	3.6	3.6	3.7	16	1.2	--	.03	--	--
SEP										
04...	.03	--	.32	--	--	.07	.21	--	.01	.03

TABLE 5.—Continued

09306900 WHITE RIVER AT MOUTH, NEAR OURAY, UTAH—Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ALUM- INUM, OIS- SOLVEO (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS- PENOE TOTAL (UG/L AS AS)	ARSENIC OIS- SOLVEO (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, SUS- PENOE RECOV- ERABLE (UG/L AS BA)	BARIUM, OIS- SOLVEO (UG/L AS BA)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)	BERYL- LIUM, SUS- PENOE RECOV- ERABLE (UG/L AS BE)
OCT											
06...	1600	--	20	--	--	2	--	--	0	--	--
NOV											
29...	1700	--	--	--	--	--	--	--	--	--	--
JAN											
03...	1300	--	10	--	--	--	--	--	--	--	--
12...	1000	--	--	--	--	--	--	--	--	--	--
FEB											
01...	1830	--	--	--	--	--	--	--	--	--	--
MAR											
18...	1300	--	--	--	--	--	--	--	--	--	--
APR											
25...	1300	--	100	--	--	2	--	--	0	--	--
MAY											
04...	1700	14000	0	5	4	1	300	300	0	10	0
JUN											
16...	1600	26000	20	5	3	2	500	100	400	5	5
JUL											
10...	1500	--	--	--	--	--	--	--	--	--	--
27...	1030	--	100	--	--	--	--	--	--	--	--
AUG											
16...	1500	--	--	--	--	--	--	--	--	--	--
SEP											
04...	2200	--	30	--	--	2	--	--	200	--	--

DATE	BERYL- LIUM, OIS- SOLVEO (UG/L AS BE)	BORON, OIS- SOLVEO (UG/L AS B)	CAODMIUM TOTAL RECOV- ERABLE (UG/L AS CO)	CAODMIUM SUS- PENOE RECOV- ERABLE (UG/L AS CO)	CAODMIUM OIS- SOLVEO (UG/L AS CO)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, SUS- PENOE RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, OIS- SOLVEO (UG/L AS CR)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COBALT, SUS- PENOE RECOV- ERABLE (UG/L AS CO)	COBALT, OIS- SOLVEO (UG/L AS CO)
OCT											
06...	--	200	--	--	0	--	--	0	--	--	--
NOV											
29...	--	120	--	--	--	--	--	--	--	--	--
JAN											
03...	--	120	--	--	--	--	--	--	--	--	--
12...	--	120	--	--	--	--	--	--	--	--	--
FEB											
01...	--	140	--	--	--	--	--	--	--	--	--
MAR											
18...	--	160	--	--	--	--	--	--	--	--	--
APR											
25...	--	80	--	--	0	--	--	0	--	--	--
MAY											
04...	10	100	1	0	1	10	10	0	13	12	1
JUN											
16...	0	70	1	0	1	40	40	0	15	15	0
JUL											
10...	--	60	--	--	--	--	--	--	--	--	--
27...	--	100	--	--	--	--	--	--	--	--	--
AUG											
16...	--	140	--	--	--	--	--	--	--	--	--
SEP											
04...	--	130	--	--	0	--	--	0	--	--	--

DATE	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, SUS- PENOE RECOV- ERABLE (UG/L AS CU)	COPPER, OIS- SOLVEO (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENOE RECOV- ERABLE (UG/L AS FE)	IRON, OIS- SOLVEO (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, SUS- PENOE RECOV- ERABLE (UG/L AS PB)	LEAD, OIS- SOLVEO (UG/L AS PB)	LITHIUM TOTAL RECOV- ERABLE (UG/L AS LI)	LITHIUM SUS- PENOE RECOV- ERABLE (UG/L AS LI)
OCT											
06...	--	--	2	--	--	20	--	--	1	--	--
NOV											
29...	--	--	--	--	--	20	--	--	--	--	--
JAN											
03...	--	--	--	--	--	40	--	--	--	--	--
12...	--	--	--	--	--	10	--	--	--	--	--
FEB											
01...	--	--	--	--	--	10	--	--	--	--	--
MAR											
18...	--	--	--	--	--	20	--	--	--	--	--
APR											
25...	--	--	0	--	--	40	--	--	1	--	--
MAY											
04...	57	52	5	26000	--	30	33	23	10	40	40
JUN											
16...	46	44	2	35000	35000	70	37	31	6	50	50
JUL											
10...	--	--	--	--	--	40	--	--	--	--	--
27...	--	--	--	--	--	50	--	--	--	--	--
AUG											
16...	--	--	--	--	--	30	--	--	--	--	--
SEP											
04...	--	--	6	--	--	20	--	--	23	--	--

09306900 WHITE RIVER AT MOUTH, NEAR OURAY, UTAH—Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	LITHIUM OIS- SOLVED (UG/L AS LI)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDEO RECOV. (UG/L AS MN)	MANGA- NESE, OIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY SUS- PENDEO RECOV- ERABLE (UG/L AS HG)	MERCURY OIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, TOTAL RECOV- ERABLE (UG/L AS MO)	MOLYB- DENUM, SUS- PENDEO RECOV. (UG/L AS MO)	MOLYB- DENUM, OIS- SOLVED (UG/L AS MO)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)
OCT 06...	30	--	--	10	--	--	.0	--	--	2	--
NOV 29...	--	--	--	--	--	--	--	--	--	--	--
JAN 03...	8	--	--	10	--	--	--	--	--	--	--
JAN 12...	--	--	--	--	--	--	--	--	--	--	--
FEB 01...	--	--	--	--	--	--	--	--	--	--	--
MAR 18...	--	--	--	--	--	--	--	--	--	--	--
APR 25...	10	--	--	0	--	--	.0	--	--	0	--
MAY 04...	5	720	720	0	.0	.0	.0	5	5	0	17
JUN 16...	5	950	950	5	.1	.1	.0	7	3	4	30
JUL 10...	--	--	--	--	--	--	--	--	--	--	--
JUL 27...	20	--	--	2	--	--	--	--	--	--	--
AUG 16...	--	--	--	--	--	--	--	--	--	--	--
SEP 04...	20	--	--	0	--	--	.0	--	--	3	--

DATE	NICKEL, SUS- PENDEO RECOV- ERABLE (UG/L AS NI)	NICKEL, OIS- SOLVED (UG/L AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, SUS- PENDEO TOTAL (UG/L AS SE)	SELE- NIUM, OIS- SOLVED (UG/L AS SE)	STRON- TIUM, OIS- SOLVED (UG/L AS SR)	VANA- DIUM, OIS- SOLVED (UG/L AS V)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, SUS- PENDEO RECOV- ERABLE (UG/L AS ZN)	ZINC, OIS- SOLVED (UG/L AS ZN)
OCT 06...	--	--	--	--	0	1100	2.7	--	--	8
NOV 29...	--	--	--	--	--	--	--	--	--	--
JAN 03...	--	--	--	--	--	1000	--	--	--	--
JAN 12...	--	--	--	--	--	--	--	--	--	--
FEB 01...	--	--	--	--	--	--	--	--	--	--
MAR 18...	--	--	--	--	--	--	--	--	--	--
APR 25...	--	--	--	--	1	780	2.0	--	--	10
MAY 04...	13	4	1	0	1	--	2.0	140	60	80
JUN 16...	30	0	3	2	1	--	1.0	160	150	10
JUL 10...	--	--	--	--	--	--	--	--	--	--
JUL 27...	--	--	--	--	--	750	--	--	--	--
AUG 16...	--	--	--	--	--	--	--	--	--	--
SEP 04...	--	--	--	--	0	850	1.2	--	--	10

DATE	TIME	GROSS ALPHA, OIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, OIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, OIS- SOLVED (PCI/L AS SR/ YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90)
OCT 06...	1600	<8.7	20	4.1	14	3.6	13
APR 25...	1300	<4.7	38	2.2	18	1.9	16
SEP 04...	2200	7.6	4.1	<3.0	3.1	<2.8	2.8

TABLE 5.—Continued

09306900 WHITE RIVER AT MOUTH, NEAR OURAY, UTAH—Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC OIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDEO TOTAL (MG/L AS C)	CARBON, INOR- GANIC, TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	PCB, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)
OCT											
06...	1600	--	4.4	.6	55	--	2	.00	--	--	--
NOV											
29...	1700	12	2.3	--	--	--	--	--	.0	.00	.0
JAN											
03...	1300	--	--	--	47	--	--	--	--	--	--
12...	1000	2.5	2.1	--	--	--	--	--	--	--	--
FEB											
01...	1830	3.9	1.8	--	--	--	--	--	.0	.00	.0
MAR											
18...	1300	10	3.6	--	--	--	--	--	--	--	--
APR											
25...	1300	--	13	>5.0	45	--	4	.00	--	--	--
MAY											
04...	1700	16	3.7	--	--	.00	--	--	.0	.00	.0
JUN											
16...	1600	14	5.9	--	--	.00	--	--	--	--	--
JUL											
10...	1500	9.7	4.8	--	--	--	--	--	.0	.00	.0
AUG											
16...	1500	26	4.6	--	--	--	--	--	--	--	--
SEP											
04...	2200	--	4.1	1.2	41	--	2	.00	--	--	--

DATE	000, TOTAL (UG/L)	00E, TOTAL (UG/L)	DOT, TOTAL (UG/L)	OI- AZINON, TOTAL (UG/L)	OI- ELORIN TOTAL (UG/L)	EN00- SULFAN, TOTAL (UG/L)	ENORIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIOE TOTAL (UG/L)
OCT										
06...	--	--	--	--	--	--	--	--	--	--
NOV										
29...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
JAN										
03...	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--
FEB										
01...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
MAR										
18...	--	--	--	--	--	--	--	--	--	--
APR										
25...	--	--	--	--	--	--	--	--	--	--
MAY										
04...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
JUN										
16...	--	--	--	--	--	--	--	--	--	--
JUL										
10...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AUG										
16...	--	--	--	--	--	--	--	--	--	--
SEP										
04...	--	--	--	--	--	--	--	--	--	--

DATE	LINDANE TOTAL (UG/L)	MALA- THION, TOTAL (UG/L)	METHYL PARA- THION, TOTAL (UG/L)	METHYL TRI- THION, TOTAL (UG/L)	PARA- THION, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	TOTAL TRI- THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
OCT										
06...	--	--	--	--	--	--	--	--	--	--
NOV										
29...	.00	.00	.00	.00	.00	0	.00	.00	.00	.00
JAN										
03...	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--
FEB										
01...	.00	.00	.00	.00	.00	0	.00	.00	.00	.00
MAR										
18...	--	--	--	--	--	--	--	--	--	--
APR										
25...	--	--	--	--	--	--	--	--	--	--
MAY										
04...	.00	.00	.00	.00	.00	0	.00	.00	.00	.00
JUN										
16...	--	--	--	--	--	--	--	--	--	--
JUL										
10...	.00	.00	.00	.00	.00	0	.00	.00	.00	.00
AUG										
16...	--	--	--	--	--	--	--	--	--	--
SEP										
04...	--	--	--	--	--	--	--	--	--	--

TABLE 5.--CONTINUED

09306900 WHITE RIVER AT MOUTH, NEAR OURAY, UTAH--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA

WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

BENTHIC INVERTEBRATES

DIVISIONS: .CLASS		DIVERSITY INDEX = 3.08		
..ORDER				
...FAMILY				
....GENUS				
.....SPECIES				
DATE	ORGANISM	COMMON NAME	ORGANISM COUNT	SAMPLING METHOD
OCT. 25	.INSECTA			10 PICKED ROCKS
	..EPHEMPTERA	MAYFLIES		
	...HEPTAGENIIDAE			
	....HEPTAGENIA		6	
	...BAETIDAE			
	....BAETIS		4	
	...TRICORYTHIDAE			
	....TRICORYTHODES		4	
	..COLEOPTERA			
	...DRYOPIDAE	BOTTOM BEETLES		
	....HELICHUS			
	.....SUTURALIS		2	
	..TRICHOPTERA	CADDISFLIES		
	...HYDROPSYCHIDAE			
	....HYDROPSYCHE		4	
	..DIPTERA			
	...SIMULIIDAE	BLACK FLIES		
	....SIMULIUM		4	
	...CHIRONOMIDAE	MIDGES		
	....CLADOTANYTARSUS		1	
	....POLYPEDILUM		1	
	....ORTHOCLADIUS			
	.....DORENUS		2	
	.....CORYNONEURA		1	
	TOTAL		29	

TABLE 5.--CONTINUED

09306900 WHITE RIVER AT MOUTH, NEAR OURAY, UTAH--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA

WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

BENTHIC INVERTEBRATES

DIVISIONS: .CLASS		DIVERSITY INDEX = 2.54		
..ORDER				
...FAMILY				
....GENUS				
.....SPECIES				
DATE	ORGANISM	COMMON NAME	ORGANISM COUNT	SAMPLING METHOD
JULY 27	.INSECTA			10 PICKED ROCKS
	..EPHEMEROPTERA	MAYFLIES		
	...HEPTAGENIIDAE			
	....HEPTAGENIA		4	
	...OLIGONEURIIDAE			
	....LACHLANIA			
	.....POWELLI		1	
	...LEPTOPHLEBIIDAE			
	....CHOROTERPES		2	
	....TRAVERELLA		1	
	...BAETIDAE			
	....BAETIS		8	
	...TRICORYTHIDAE			
	....TRICORYTHODES		14	
	..ODONATA			
	...AGRIONIDAE	DAMSELFLIES		
	....HETAERINA			
	.....AMERICANA		1	
	..PLECOPTERA	STONEFLIES		
	...PERLIDAE			
	....ACRONEURIA			
	.....ABNORMIS		3	
	..HEMIPTERA			
	...NAUCORIDAE	CREEPING WATER BUGS		
	....AMBRYUS		1	
	..TRICHOPTERA	CADDISFLIES		
	...HYDROPSYCHIDAE			
	....HYDROPSYCHE		44	
	..DIPTERA			
	...SIMULIIDAE	BLACK FLIES		
	....SIMULIUM		36	
	...CHIRONOMIDAE	MIDGES		
	....ZAVRELIMYIA		1	
	....ORTHOCLADIUS			
	.....DORENUS		5	
	TOTAL		121	

09306900 WHITE RIVER AT MOUTH, NEAR OURAY, UTAH—Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C); WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1							---	---	---	697	667	682
2							---	---	---	709	675	693
3							630	614	622	715	689	702
4							656	630	640	800	697	714
5							640	652	664	756	720	734
6							678	622	646	768	736	753
7							648	618	634	---	---	---
8							676	648	662	---	---	---
9							677	645	660	---	---	---
10							676	646	659	671	623	645
11							697	665	678	715	669	690
12							722	678	698	858	716	780
13							723	703	712	892	858	878
14							725	657	706	906	890	899
15							1740	652	976	941	903	918
16							760	697	727	953	875	923
17							740	680	720	903	787	869
18							727	661	697	801	785	792
19							726	686	709	804	772	787
20							699	667	689	774	706	748
21							702	672	686	771	661	720
22							687	659	670	752	702	729
23							722	670	684	721	629	684
24							687	653	673	629	592	612
25							689	665	679	612	566	578
26							694	668	681	599	547	570
27							689	619	649	618	550	585
28							636	608	622	625	567	598
29							631	601	616	626	602	614
30							650	616	628	619	585	602
31							682	644	656	---	---	---
MONTH							1740	601	681	953	547	722
YEAR	1740	547	701									

NOTE.—NO DAILY SPECIFIC-CONDUCTANCE RECORD FOR OCTOBER 1977 TO JULY 31, 1978

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	14.0	7.0	10.5	7.5	4.0	6.0						
2	14.5	7.5	11.0	8.0	4.5	6.0						
3	17.0	9.5	13.0	8.0	4.0	6.0						
4	16.5	10.0	13.5	8.5	5.0	7.0						
5	17.5	12.5	15.0	10.0	6.5	8.0						
6	18.0	12.5	17.0	8.5	7.5	8.0						
7	15.5	12.5	14.0	9.0	7.0	8.0						
8	14.0	11.0	12.5	8.5	6.0	7.0						
9	14.0	10.0	12.0	---	---	---						
10	12.0	9.0	10.5	---	---	---						
11	12.0	7.5	9.5	---	---	---						
12	12.5	7.0	9.5	---	---	---						
13	13.0	7.5	10.0	---	---	---						
14	13.5	8.0	11.0	---	---	---						
15	14.0	9.0	11.5	---	---	---						
16	14.0	9.0	11.5	---	---	---						
17	14.0	9.5	11.5	---	---	---						
18	14.0	9.0	11.5	---	---	---						
19	13.5	8.5	11.0	---	---	---						
20	14.0	10.0	11.5	---	---	---						
21	14.5	10.5	12.5	---	---	---						
22	14.0	9.5	11.5	---	---	---						
23	13.0	9.0	11.0	---	---	---						
24	11.5	8.5	10.0	---	---	---						
25	11.5	7.0	9.5	---	---	---						
26	11.5	7.0	9.5	---	---	---						
27	11.5	7.5	9.5	---	---	---						
28	12.0	8.0	10.0	---	---	---						
29	11.5	9.5	10.5	---	---	---						
30	11.5	8.5	10.0	---	---	---						
31	8.5	6.0	7.5	---	---	---						
MONTH	18.0	6.0	11.5	10.0	4.0	7.0						

TABLE 5.—Continued

09306900 WHITE RIVER AT MOUTH, NEAR OURAY, UTAH—Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1										---	---	---
2										---	---	---
3										---	---	---
4										---	---	---
5										---	---	---
6										---	---	---
7										---	---	---
8										---	---	---
9										15.0	11.5	14.0
10										15.5	13.0	14.0
11										15.5	13.5	14.5
12										16.0	12.0	14.0
13										18.0	14.0	16.0
14										19.5	15.5	17.5
15										19.0	16.5	17.5
16										17.0	15.5	16.0
17										15.5	13.5	14.5
18										13.5	12.0	13.0
19										13.5	11.5	12.5
20										---	---	---
21										---	---	---
22										---	---	---
23										---	---	---
24										---	---	---
25										---	---	---
26										---	---	---
27										---	---	---
28										---	---	---
29										---	---	---
30										---	---	---
31										---	---	---
MONTH										19.5	11.5	15.0
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1				---	---	---	26.0	20.5	23.0	23.5	17.0	20.0
2				---	---	---	26.5	20.5	25.0	24.5	17.5	21.0
3				---	---	---	27.0	21.5	24.0	25.0	18.5	21.5
4				---	---	---	27.0	21.5	24.0	25.5	19.0	22.5
5				---	---	---	27.0	21.0	24.0	25.0	19.5	22.0
6				---	---	---	26.5	22.0	24.5	25.0	19.0	22.0
7				---	---	---	28.0	22.0	24.5	23.5	19.0	21.0
8				---	---	---	28.0	22.0	25.0	24.0	17.5	20.5
9				---	---	---	28.0	23.0	25.5	20.5	17.0	18.5
10				---	---	---	27.5	23.0	25.0	18.5	16.0	17.0
11				---	---	---	28.0	23.0	25.0	16.5	14.0	15.5
12				---	---	---	26.5	23.0	24.5	16.5	13.0	14.5
13				---	---	---	25.5	22.0	23.5	17.5	13.0	15.0
14				---	---	---	23.5	19.0	21.0	16.5	14.0	15.0
15				---	---	---	21.0	16.5	19.0	17.5	14.5	16.0
16				20.5	19.5	20.0	21.5	18.0	20.0	19.0	15.5	17.5
17				21.5	20.0	20.5	22.0	18.0	19.5	18.5	16.0	17.5
18				23.0	19.5	21.0	21.0	16.5	18.5	16.0	12.0	14.0
19				23.5	20.5	22.0	22.5	17.5	20.0	12.5	10.5	11.5
20				23.0	21.0	22.0	22.5	18.5	20.5	14.0	10.0	12.0
21				23.5	21.0	22.5	22.5	18.5	20.5	13.5	10.0	12.0
22				24.5	20.5	22.5	23.0	19.0	21.0	14.0	10.0	12.0
23				25.0	21.0	23.0	23.0	18.5	21.0	16.0	11.0	13.5
24				25.5	21.0	23.0	23.5	18.5	21.0	17.0	12.5	15.0
25				26.0	21.5	23.5	23.5	18.5	21.0	18.5	14.0	16.5
26				27.0	22.5	24.5	24.0	18.5	21.5	19.5	15.0	17.0
27				27.5	21.0	25.0	23.5	18.0	20.5	19.0	15.0	17.0
28				26.5	23.0	24.5	22.5	18.0	20.5	19.0	15.0	16.5
29				27.5	22.5	25.0	23.5	18.5	21.0	19.0	14.5	16.5
30				28.0	22.0	25.0	24.0	18.5	21.0	18.5	14.0	16.5
31				25.5	22.5	24.0	22.5	19.0	20.5	---	---	---
MONTH				28.0	19.5	23.0	28.0	16.5	22.0	25.5	10.0	17.0
YEAR	28.0	4.0	17.0									

TABLE 5.—Continued

09306900 WHITE RIVER AT MOUTH, NEAR OURAY, UTAH—Continued

SUSPENDED-SOILMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN CONCENTRATION (MG/L)	LOADS (T/OAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/OAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/OAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/OAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/OAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/OAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/OAY)
OCTOBER			NOVEMBER			DECEMBER			JANUARY			FEBRUARY		
1	545	258	2760	2390	1260	1190	450	364	280	249	480	492		
2	525	244	1490	1380	1690	1470	490	397	340	303	410	443		
3	410	176	1180	1040	1260	1130	460	373	500	445	560	590		
4	420	186	1460	1230	949	797	350	283	450	401	3820	4020		
5	526	230	826	682	1430	1220	350	255	350	312	3800	4100		
6	530	223	952	787	1150	1010	540	408	350	312	5800	6730		
7	27900	21400	18700	26100	1040	913	570	523	400	356	5720	7570		
8	28400	37500	15000	19700	964	849	690	633	460	410	6050	8980		
9	8210	8360	5080	4470	670	543	610	560	360	321	6270	8630		
10	7340	6000	1980	1620	1100	832	290	258	480	428	6660	10800		
11	5730	4220	1110	836	1100	832	270	219	440	392	8380	15800		
12	1810	1170	901	608	510	399	500	418	290	258	6840	14800		
13	1170	758	1140	797	810	678	400	367	340	303	5310	10600		
14	972	630	1270	1010	880	760	430	395	400	356	3710	6610		
15	1090	803	918	724	1200	1040	620	569	450	401	2320	3260		
16	1020	768	1110	857	1900	1640	510	441	600	535	2000	2320		
17	1090	821	925	734	1000	864	350	302	450	401	1560	1560		
18	1300	1000	764	627	1100	950	400	346	400	335	1330	1120		
19	1120	862	796	653	730	631	610	527	400	324	1230	1040		
20	1100	832	945	842	420	283	430	372	380	287	1520	1630		
21	1120	847	1210	1080	300	138	450	389	300	219	3320	4440		
22	1240	954	364	246	350	151	430	360	390	284	5630	9350		
23	1260	1010	421	227	240	104	310	259	700	510	6350	9960		
24	1220	1040	1000	810	190	82	350	293	760	575	7000	14000		
25	1080	863	1880	1780	400	184	250	209	740	579	8350	18600		
26	1100	838	1710	1750	890	865	340	285	620	502	11900	29000		
27	1040	783	2420	2690	820	753	320	268	700	643	9000	14100		
28	1100	838	2050	2400	640	553	360	321	640	622	4800	6230		
29	1040	812	1630	1760	410	332	410	365	---	---	2660	3300		
30	1500	1190	1770	1820	500	405	320	285	---	---	2520	3060		
31	1090	898	---	---	400	324	300	267	---	---	2340	2960		
TOTAL	---	96514	---	81650	---	21922	---	11311	---	11063	---	226095		
DAY	MEAN CONCENTRATION (MG/L)	LOADS (T/OAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/OAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/OAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/OAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/OAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/OAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/OAY)
APRIL			MAY			JUNE			JULY			AUGUST		
1	2460	3270	3660	9490	3240	18100	2920	19100	510	523	480	336		
2	3000	4670	3550	9110	3110	17800	2450	15900	460	466	415	275		
3	5300	10800	3230	8200	2820	15600	2000	12300	480	473	390	259		
4	5260	10900	2730	6930	2870	16000	1680	10100	560	544	350	229		
5	3570	6810	3290	9590	3060	17400	1740	9110	490	470	295	190		
6	2390	4010	3000	9310	2860	17000	1400	6460	500	472	280	171		
7	2520	4500	3130	9550	3750	23300	1380	5780	520	463	295	169		
8	2550	4170	2700	8020	2760	16000	1290	4880	540	467	285	160		
9	1890	2770	2580	6690	2730	17000	1050	3690	680	569	39500	174000		
10	1960	3100	2300	5460	2090	12700	848	2630	550	434	33500	61300		
11	1960	3340	2050	4590	1880	12200	784	2290	430	340	23600	25600		
12	1320	2170	2100	4540	2600	19700	1270	3600	470	358	9100	9410		
13	1460	2200	2200	4750	3020	27700	5380	16300	560	463	3000	2780		
14	1710	2640	1940	4190	3250	30400	2620	7570	850	939	1570	1530		
15	1740	2880	2050	4980	3590	33800	996	2610	10500	11700	1500	1460		
16	1670	2780	2850	8310	3490	34400	777	1850	2700	2710	1500	1440		
17	1760	2970	6700	34000	3580	36300	697	1510	2720	3400	1710	1570		
18	1640	2880	11400	63400	3590	38400	686	1410	1670	1960	1500	1360		
19	1780	3160	9050	54500	3310	35500	1330	2910	830	847	1080	1010		
20	1530	2560	6050	34300	3590	35200	850	1880	600	590	2400	2590		
21	1570	2430	4750	24100	2940	26800	760	1560	615	624	2180	2760		
22	1390	2050	4290	21400	2710	22500	610	1120	585	592	1320	1630		
23	1270	1980	4800	25000	2980	23700	720	1210	595	567	1130	1380		
24	1560	2480	4580	24400	3170	25400	660	1070	590	524	890	1050		
25	2830	4350	5050	28600	2890	23600	850	1310	715	595	730	867		
26	3300	4990	5880	36700	2840	23500	900	1290	750	610	720	828		
27	4390	7110	4520	31100	3240	27300	670	904	630	507	690	777		
28	4490	8970	4170	25900	2810	22400	540	685	530	425	610	670		
29	4100	9190	3820	23700	2690	19600	590	717	425	334	570	599		
30	3860	9380	3300	18300	2680	18300	630	731	445	352	620	660		
31	---	---	3230	17700	---	---	680	734	510	397	---	---		
TOTAL	---	135510	---	576810	---	707600	---	143211	---	33715	---	297060		
TOTAL LOAD FOR YEAR:			2342461			TONS.								

TABLE 5.—Continued

09306900 WHITE RIVER AT MOUTH, NEAR OURAY, UTAH—Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	STREAM- FLOW, INSTAN- TANEDUS (CFS)	TEMPER- ATURE (DEG C)	SED1- MENT, SUS- PENDEED (MG/L)	SED1- MENT DIS- CHARGE, SUS- PENDEED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM
DCT							
01...	1200	396	11.0	328	351	28	40
NOV							
20...	1500	464	3.0	223	274	9	13
DEC							
10...	1600	280	1.0	316	239	17	23
FEB							
20...	1550	339	.0	131	120	--	--
MAR							
03...	1640	560	.0	3000	4540	58	66
06...	1700	620	.0	737	1230	50	57
20...	1345	567	6.0	2020	3090	37	43
APR							
12...	1300	425	7.0	522	599	13	16
MAY							
06...	1630	530	9.0	2890	4140	55	60
JUL							
10...	0805	2000	23.0	3390	18300	31	39
24...	1430	792	23.5	1230	2630	25	27
30...	0830	688	21.0	12500	23200	46	59
AUG							
14...	1540	604	21.0	6460	10500	37	54
SEP							
12...	0715	730	19.0	13100	25800	51	68
23...	1300	435	15.0	430	505	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM
DCT						
01...	52	65	99	99	100	--
NOV						
20...	--	38	60	98	100	--
DEC						
10...	--	43	70	98	100	--
FEB						
20...	--	--	--	--	--	--
MAR						
03...	78	84	87	97	100	--
06...	78	93	96	100	--	--
20...	58	72	82	95	99	100
APR						
12...	24	56	73	99	100	--
MAY						
06...	73	87	93	99	100	--
JUL						
10...	51	74	88	100	--	--
24...	32	53	74	98	100	--
30...	85	92	95	99	100	--
AUG						
14...	80	84	90	100	--	--
SEP						
12...	93	96	98	100	--	--
23...	--	--	--	--	--	--

TABLE 5.—Continued

09306900 WHITE RIVER AT MOUTH, NEAR OURAY, UTAH—Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	STREAM- FLOW, INSTAN- TANEDUS (CFS)	TEMPER- ATURE (DEG C)	SEDIM- ENT, SUS- PENDE (MG/L)	SEDIM- ENT DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM
DCT												
22...	1630	435	10.0	246	289	--	--	--	--	--	--	--
NOV												
25...	1300	359	.0	572	554	--	--	--	--	--	--	--
DEC												
29...	1455	210	.0	424	240	--	--	--	--	--	--	--
JAN												
27...	1230	320	.0	181	156	--	--	--	--	--	--	--
FEB												
12...	1720	620	.0	702	1180	62	68	75	88	95	100	--
MAR												
16...	1415	550	1.0	5220	7750	61	74	88	96	99	100	--
APR												
19...	1400	576	11.0	696	1080	29	33	40	64	77	99	100
20...	1415	597	13.0	1060	1710	--	--	--	--	--	--	--
MAY												
11...	0527	1250	15.0	4570	15400	50	51	72	96	99	100	--
JUN												
20...	1950	891	22.0	1590	3830	10	10	15	40	68	100	--
JUL												
20...	1430	191	26.5	304	157	--	--	--	--	--	--	--
AUG												
11...	1500	269	24.5	944	686	--	--	--	--	--	--	--
SEP												
07...	1530	237	21.0	2940	1880	66	73	99	100	--	--	--
15...	1900	226	22.0	1220	744	71	73	94	96	97	100	--
16...	1030	226	17.5	475	290	--	--	--	--	--	--	--

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEDUS (CFS)	TEMPER- ATURE (DEG C)	SEDIM- ENT, SUS- PENDE (MG/L)	SEDIM- ENT DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM
DCT												
10...	1430	330	--	1840	1640	--	--	--	--	--	--	--
18...	1015	292	10.5	1150	907	--	--	--	--	--	--	--
NOV												
29...	1700	402	2.0	1620	1760	--	--	--	--	--	--	--
DEC												
05...	1530	335	6.0	1090	986	--	--	--	--	--	--	--
JAN												
12...	1000	310	.0	209	175	--	--	--	--	--	--	--
19...	1540	320	.0	275	238	--	--	--	--	--	--	--
MAR												
18...	1300	322	9.0	1200	1040	--	--	--	--	--	--	--
APR												
25...	1330	580	14.0	3150	4930	--	--	--	--	--	--	--
MAY												
04...	1700	940	13.5	2400	6090	--	--	--	--	--	--	--
17...	1445	1660	14.0	8210	36800	23	30	52	82	91	97	100
JUN												
16...	1600	3620	18.0	3400	33200	--	--	--	--	--	--	--
JUL												
10...	1500	1410	23.0	753	2870	--	--	--	--	--	--	--
AUG												
08...	1600	335	--	260	235	--	--	--	--	--	--	--
16...	1500	362	21.0	2300	2250	--	--	--	--	--	--	--
SEP												
12...	1530	371	15.0	14100	14100	--	--	--	--	--	--	--
20...	1140	389	--	876	920	--	--	--	--	--	--	--

TABLE 5.—Continued

09307500 WILLOW CREEK ABOVE DIVERSIONS, NEAR OURAY, UTAH

LOCATION.—Lat 39°33'59", long 109°35'12", in NE1/4SW1/4SE1/4 sec.29, T.14 S., R.21 E., Uintah County, Uintah and Ouray Indian Reservation, Hydrologic Unit 14060006, on right bank 0.1 mi (0.2 km) downstream from Big Canyon and 36 mi (57.9 km) southeast of Ouray.

DRAINAGE AREA.—297 mi² (769 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—August 1950 to September 1955, September 1957 to September 1970, and October 1974 to current year.

GAGE.—Water-stage recorder. Altitude of gage is 6,000 ft (1,829 m) from topographic map. Prior to Nov. 7, 1952, at site 0.9 mi (1.4 km) downstream at different datum. Nov. 7, 1952 to Sept. 30, 1970, at site 0.8 mi (1.3 km) downstream at different datum, Oct. 1, 1974 to July 18, 1977, at present site at datum 2.00 ft (0.610 m) higher.

REMARKS.—Records good except those for winter period, which are fair.

AVERAGE DISCHARGE.—22 years (water years 1951-55, 1958-70, 1975-78), 19.6 ft³/s (0.555 m³/s), 14,200 acre-ft/yr (17.51 km³/yr).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 2,240 ft³/s (63.4 m³/s) July 19, 1977, gage height, 9.55 ft (2.911 m), from rating curve extended above 100 ft³/s (2.83 m³/s) on the basis of slope-area measurements of peak flow; minimum, 0.3 ft³/s (0.008 m³/s) Aug. 21-23, 1960.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 61 ft³/s (1.73 m³/s) Apr. 27, gage height, 2.87 ft (0.875 m), no peak above base of 140 ft³/s (3.96 m³/s); maximum gage height, 4.13 ft (1.259 m) Feb. 20 (result of ice jam); minimum, 3.2 ft³/s (0.091 m³/s) Sept. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	14	13	11	9.0	13	35	45	31	13	7.4	3.9
2	13	15	16	10	8.7	13	34	45	31	12	7.2	3.7
3	13	17	18	11	8.5	13	30	44	28	12	7.0	4.3
4	12	16	18	11	8.5	14	28	43	26	11	6.8	4.4
5	12	15	16	12	8.8	14	29	40	25	11	6.7	4.2
6	13	17	12	12	9.4	16	29	40	28	11	6.6	3.7
7	27	19	13	12	9.0	18	30	40	24	11	6.4	3.7
8	20	16	13	12	9.0	21	33	40	23	11	6.3	4.1
9	16	13	13	12	9.0	23	34	39	22	10	6.2	4.6
10	16	10	13	12	11	22	31	39	20	9.9	6.1	4.8
11	15	16	13	12	11	23	32	39	20	10	6.0	4.3
12	15	17	14	12	10	23	37	39	19	12	6.0	6.0
13	15	15	14	11	9.5	19	37	37	18	10	6.4	6.5
14	15	15	15	12	9.0	20	35	35	18	9.4	8.0	6.6
15	14	16	15	13	8.0	18	36	35	17	9.4	6.1	7.1
16	14	15	15	14	8.0	18	38	36	17	10	5.1	7.3
17	14	15	14	14	8.0	21	35	37	17	10	4.6	6.7
18	14	18	14	13	8.0	22	31	37	16	9.9	4.3	8.3
19	14	15	12	12	9.0	23	33	35	16	9.7	5.1	7.1
20	13	8.9	10	12	10	23	35	34	16	9.6	5.5	7.3
21	13	9.5	9.0	12	10	23	36	35	16	9.4	5.9	7.8
22	13	9.8	9.2	11	10	25	32	35	16	9.3	6.1	7.7
23	12	11	10	10	10	27	33	34	15	9.2	5.3	7.7
24	12	17	12	9.5	10	28	35	33	14	8.9	4.6	7.5
25	12	19	13	9.0	11	26	37	32	14	8.7	4.2	7.0
26	12	18	13	9.0	12	26	38	32	14	8.5	4.2	7.1
27	12	17	13	8.5	13	26	46	31	13	8.3	4.1	7.3
28	14	16	13	8.5	13	27	43	31	13	8.1	4.1	7.4
29	15	15	13	9.0	---	28	44	31	14	8.0	4.4	7.1
30	15	15	14	9.0	---	30	44	31	14	7.8	4.3	7.2
31	15	---	12	9.0	---	32	---	31	---	7.5	4.2	---
TOTAL	443	450.2	412.2	344.5	270.4	675	1049	1135	575	305.6	175.2	182.4
MEAN	14.3	15.0	13.3	11.1	9.66	21.8	35.0	36.6	19.2	9.86	5.65	6.08
MAX	27	19	18	14	13	32	46	45	31	13	8.0	8.3
MIN	12	8.9	9.0	8.5	8.0	13	28	31	13	7.5	4.1	3.7
AC-FT	879	893	818	683	536	1340	2080	2250	1140	606	348	362

WTR YR 1978 TOTAL 6017.5 MEAN 16.5 MAX 46 MIN 3.7 AC-FT 11940

TABLE 5.—Continued

09307500 WILLOW CREEK ABOVE DIVERSIONS,
NEAR OURAY, UTAH—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—October 1974 to current year. Miscellaneous sediment data for water years 1975-76 given below were not previously published.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHDS)	PH (UNITS)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN DEMAND, CHEM- ICAL (LDW LEVEL) (MG/L)	HARD- NESS (MG/L AS CACD3)	HARD- NESS, NONCAR- BONATE (MG/L AS CACD3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT 27...	1000	13	6.5	780	7.6	8.8	24	360	58	75	42
NOV 16...	1430	12	5.5	800	--	8.6	--	--	--	--	--
JAN 17...	1730	14	4.0	780	7.4	11.0	9	360	61	78	39
FEB 15...	1230	7.1	.0	800	8.4	12.2	--	--	--	--	--
MAR 21...	1030	23	8.0	760	--	--	--	--	--	--	--
APR 18...	1500	32	12.5	920	--	8.8	170	360	100	86	34
JUN 20...	1615	15	25.0	700	8.2	9.4	--	--	--	--	--
JUL 28...	0730	8.1	12.5	700	--	9.6	9	340	70	60	46
AUG 17...	1005	5.1	12.5	700	--	--	--	--	--	--	--
SEP 04...	1600	4.4	23.0	730	--	7.8	9	300	62	62	35

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACD3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CD2)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLOR- IDE, DIS- SOLVED (MG/L AS CL)
OCT 27...	48	22	1.1	1.7	370	0	300	15	.1	166	4.1
NOV 16...	--	--	--	--	--	--	--	--	--	--	--
JAN 17...	47	22	1.1	1.5	360	0	300	23	--	140	5.7
FEB 15...	--	--	--	--	--	--	--	--	--	--	--
MAR 21...	--	--	--	--	--	--	--	--	--	--	--
APR 18...	33	17	.8	1.8	310	--	250	--	.1	150	4.0
JUN 20...	--	--	--	--	--	--	--	--	--	--	--
JUL 28...	77	33	1.8	3.3	330	--	270	--	--	210	8.0
AUG 17...	--	--	--	--	--	--	--	--	--	--	--
SEP 04...	40	22	1.0	2.0	290	--	240	--	.0	140	5.2

DATE	FLUOR- IDE, DIS- SOLVED (MG/L AS F)	BROMIDE DIS- SOLVED (MG/L AS BR)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3)
OCT 27...	.3	.1	16	525	530	532	.71	10.6	110	.18	.80
NOV 16...	--	--	--	--	--	--	--	--	--	--	--
JAN 17...	.3	--	17	509	--	508	.69	19.4	--	.19	.84
FEB 15...	--	--	--	--	--	--	--	--	--	--	--
MAR 21...	--	--	--	--	--	--	--	--	--	--	--
APR 18...	.2	.1	16	466	500	481	.63	40.3	1000	.48	2.1
JUN 20...	--	--	--	--	--	--	--	--	--	--	--
JUL 28...	.3	--	14	571	--	582	.78	7.74	--	.01	.04
AUG 17...	--	--	--	--	--	--	--	--	--	--	--
SEP 04...	.2	.1	14	444	--	443	.60	5.29	29	.01	.04

TABLE 5.—Continued

09307500 WILLOW CREEK ABOVE DIVERSIONS, NEAR OURAY, UTAH—Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS TOTAL (MG/L AS PO4)	PHOS- PHORUS, ORTHOPHOS- PHATE, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHOPHOS- PHATE, DIS- SOLVED (MG/L AS PO4)
OCT 27...	.00	.00	.18	.03	.04	.40	.14	.43	.00	.00
NOV 16...	--	--	--	--	--	--	--	--	--	--
JAN 17...	.01	.03	.20	.06	.08	.42	.12	--	.03	.09
FEB 15...	--	--	--	--	--	--	--	--	--	--
MAR 21...	--	--	--	--	--	--	--	--	--	--
APR 18...	.01	.03	.49	.00	.00	2.2	.73	2.2	.02	.06
JUN 20...	--	--	--	--	--	--	--	--	--	--
JUL 28...	.00	.00	.01	.01	.01	.17	.06	--	.01	.03
AUG 17...	--	--	--	--	--	--	--	--	--	--
SEP 04...	.00	.00	.01	.02	.03	.59	.04	.12	.01	.03

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)
OCT 27...	1000	10	S	200	50	0	S	1	20
JAN 17...	1730	0	--	--	50	--	--	--	30
APR 18...	1500	100	S	200	30	1	0	3	20
JUL 28...	0730	20	--	--	100	--	--	--	20
SEP 04...	1600	30	T	100	50	0	0	3	40

DATE	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 27...	0	20	4	.0	2	0	870	3.1	8
JAN 17...	--	8	20	--	--	--	930	--	--
APR 18...	0	10	20	.0	2	0	920	4.0	10
JUL 28...	--	20	T	--	--	--	930	--	--
SEP 04...	3	10	0	.0	2	0	800	3.6	10

DATE	TIME	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-13T)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-13T)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90)
OCT 27...	1000	<5.4	6.7	4.9	5.7	4.4	5.3
APR 18...	1500	5.1	73	3.9	59	3.4	55
SEP 04...	1600	<2.2	.7	1.6	1.1	1.5	1.1

DATE	TIME	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)	CARBON, INOR- GANIC, TOTAL (MG/L AS C)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT 27...	1000	3.0	2.5	14	2	.10
JAN 17...	1730	--	--	73	--	--
APR 18...	1500	3.6	--	98	0	.10
SEP 04...	1600	6.0	.3	58	3	.00

TABLE 5.--CONTINUED

09307500 WILLOW CREEK ABOVE DIVERSIONS, NEAR OURAY, UTAH--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA

WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

BENTHIC INVERTEBRATES

DIVISIONS: .CLASS		DIVERSITY INDEX = 2.97		
	..ORDER			
	...FAMILY			
GENUS			
SPECIES			
DATE	ORGANISM	COMMON NAME	ORGANISM COUNT	SAMPLING METHOD
MAY 23	..INSECTA			4 SURBER SAMPLES (4 FT ² TOTAL)
	..EPHEMEROPTERA	MAYFLIES		
	...HEPTAGENIIDAE			
	....HEPTAGENIA		13
	...LEPTOPHLEBIIDAE			
	....TRAVERELLA		2
	...BAETIDAE			
	....BAETIS		17
	...TRICORYTHIDAE			
	....TRICORYTHODES		8
	..COLEOPTERA			
	..DRYOPIDAE	BOTTOM BEETLES		
	....HELICHUS		
	.....SUTURALIS		2
	..TRICHOPTERA	CADDISFLIES		
	...HYDROPSYCHIDAE			
	....HYDROPSYCHE		10
	..DIPTERA			
	...SIMULIIDAE	BLACK FLIES		
	....SIMULIUM		8
	...CHIRONOMIDAE	MIDGES		
	....ZAVRELIMYIA		3
	....POLYPEDILUM		1
	....CRICOTOPUS		3
	....THIENEMANNIELLA		1
TOTAL			68	

TABLE 5.--CONTINUED

09307500 WILLOW CREEK ABOVE DIVERSIONS, NEAR OURAY, UTAH--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA

WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

BENTHIC INVERTEBRATES

DIVISIONS: .CLASS		DIVERSITY INDEX = 2.16		
..ORDER				
...FAMILY				
....GENUS				
.....SPECIES				
DATE	ORGANISM	COMMON NAME	ORGANISM COUNT	SAMPLING METHOD
JULY 28	.INSECTA			4 SURBER SAMPLES (4 FT ² TOTAL)
	..EPHEMEROPTERA	MAYFLIES		
	...HEPTAGENIIDAE			
	....HEPTAGENIA		17
	...LEPTOPHLEBIIDAE			
	....CHOROTERPE		4
	...TRICORYTHIDAE			
	....TRICORYTHODES		26
	..ODONATA			
	...GOMPHIDAE	DRAGONFLIES		
	....OPHIOGOMPHUS		
	.....SEVERUS		3
	..TRICHOPTERA	CADDISFLIES		
	...HYDROPSYCHIDAE			
	....HYDROPSYCHE		2
	..DIPTERA			
	...SIMULIIDAE	BLACK FLIES		
	....SIMULIUM		9
	...CHIRONOMIDAE	MIDGES		
	....CONCHA-, ARCTO-, OR RHEOPELOPIA		1
TOTAL			62	

TABLE 5.—Continued

09307500 WILLOW CREEK ABOVE DIVERSIONS, NEAR OURAY, UTAH—Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDEO (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDEO (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SFD. SUSP. FALL DIAM. % FINER THAN .004 MM
NOV 22...	--	18	4.0	3200	159	--	--
DEC 17...	0950	13	.0	41	1.5	--	--
JAN 21...	1330	18	.5	543	27	13	19
FEB 20...	1030	21	.0	749	43	12	14
MAR 17...	1710	21	8.5	863	49	30	36
APR 15...	1755	20	11.0	1720	93	17	26
JUL 23...	1500	21	22.0	1940	114	20	21
AUG 19...	1000	13	11.0	624	23	--	--
SEP 23...	1610	15	17.0	976	40	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM
NOV 22...	--	--	--	--	--	--
DEC 17...	--	--	--	--	--	--
JAN 21...	--	52	62	83	100	--
FEB 20...	--	46	54	80	100	--
MAR 17...	53	90	98	100	--	--
APR 15...	43	69	78	94	100	--
JUL 23...	36	63	76	90	98	100
AUG 19...	--	--	--	--	--	--
SEP 23...	--	--	--	--	--	--

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDEO (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDEO (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM
OCT 22...	1200	20	5.0	1700	92	--	--	--	--	--	--	--
JAN 21...	1430	14	.5	730	29	--	--	--	--	--	--	--
FEB 18...	1630	21	.0	2550	147	--	--	--	--	--	--	--
MAR 15...	1800	20	7.0	2060	111	--	--	--	--	--	--	--
APR 21...	1600	32	13.5	2140	186	24	29	41	78	88	99	100
MAY 20...	1430	43	13.0	3000	348	--	--	--	--	--	--	--
JUN 22...	1745	26	21.0	1180	93	--	--	--	--	--	--	--
SEP 13...	1900	14	18.0	708	27	--	--	--	--	--	--	--

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDEO (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDEO (T/DAY)
APR 18...	1500	32	12.5	1590	137
JUN 20...	1700	16	25.0	436	19

TABLE 5.—Continued

09307800 HILL CREEK ABOVE TOWAVE RESERVOIR, NEAR OURAY, UTAH

LOCATION.—Lat $39^{\circ}31'33''$, long $109^{\circ}44'02''$, in NW1/4NE1/4SE1/4 sec.12, T.15 S., R.19 E., Uintah County, Hydrologic Unit 14060006, on left bank 0.5 mi (0.8 km) upstream from Lower Wagon Canyon, 3.5 mi (5.6 km) south of Towave Reservoir, and 39 mi (63 km) south of Ouray.

DRAINAGE AREA.—89.7 mi² (232 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1974 to current year.

GAGE.—Water-stage recorder and concrete control. Altitude of gage is 6,470 ft (1,972 m) from topographic map.

REMARKS.—Records good except those for winter period, which are fair.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 47 ft³/s (1.33 m³/s) May 28, 1975, gage height, 2.56 ft (0.780 m); maximum gage height, 4.73 ft (1.442 m) Feb. 21, 1978 (backwater from ice); minimum daily, 0.07 ft³/s (0.002 m³/s) Aug. 10, 1977.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 15 ft³/s (0.42 m³/s) Apr. 27, gage height, 1.84 ft (0.561 m); maximum gage height, 4.73 ft (1.442 m) Feb. 21 (backwater from ice); minimum 0.14 ft³/s (0.004 m³/s) Sept. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	4.0	4.5	3.5	2.8	6.0	12	13	8.4	4.9	1.7	.66
2	1.2	4.0	4.6	3.2	2.7	6.0	11	13	8.2	4.5	1.6	.66
3	1.4	4.7	4.9	3.2	2.7	6.0	9.6	13	7.8	4.0	1.3	.85
4	1.4	4.4	5.2	3.4	3.0	6.0	8.3	13	7.6	4.0	1.1	.92
5	1.4	4.2	5.4	3.6	3.5	6.5	8.7	13	7.5	4.0	.98	.82
6	1.9	5.2	5.3	3.8	4.0	7.0	8.3	13	8.0	4.1	.84	.66
7	2.6	5.7	5.2	3.8	4.0	8.0	8.0	12	7.7	4.0	.78	.69
8	3.2	4.7	4.9	3.8	4.0	9.1	8.5	12	7.5	3.7	.98	.70
9	2.6	3.4	4.7	3.8	4.5	9.9	9.1	11	7.3	3.4	1.4	.87
10	2.6	1.0	4.5	3.8	4.5	9.1	8.7	11	7.2	3.3	1.6	.92
11	2.6	.32	4.6	3.8	4.5	8.9	8.6	11	7.0	3.4	1.3	.76
12	2.8	1.2	4.7	3.8	4.0	9.4	9.1	11	6.9	4.1	1.0	1.1
13	3.0	3.4	4.8	3.5	3.5	8.3	9.7	11	6.8	4.0	1.8	1.5
14	3.2	4.7	4.9	3.8	3.3	7.8	9.9	11	6.7	3.3	3.2	1.7
15	3.2	4.0	5.0	4.2	3.2	7.1	9.5	11	6.6	3.4	3.1	1.9
16	3.2	4.0	4.5	4.5	3.2	7.8	10	10	6.5	3.7	2.3	2.1
17	3.4	4.3	4.0	4.5	3.1	8.5	10	12	6.4	3.7	1.7	2.3
18	3.4	4.2	3.9	4.3	3.1	8.4	9.1	12	6.4	3.2	1.3	3.6
19	3.7	3.8	3.5	4.0	3.5	8.9	8.8	11	6.3	4.8	1.5	3.0
20	4.0	2.7	2.9	3.8	4.0	9.3	8.8	11	6.2	3.5	1.6	3.1
21	4.2	2.5	2.7	3.7	3.9	9.5	9.0	11	6.2	2.9	1.7	3.0
22	4.2	4.0	3.0	3.5	3.7	11	9.1	11	6.2	2.6	1.5	3.0
23	4.2	4.5	3.5	3.3	3.5	12	9.2	9.7	5.8	2.6	1.4	3.0
24	4.2	5.0	4.0	3.0	4.0	11	9.3	9.1	5.4	2.5	1.2	2.8
25	4.2	5.5	4.0	2.7	5.0	9.2	9.9	8.9	5.0	2.5	1.1	2.7
26	4.2	5.5	3.9	2.7	5.5	7.1	11	8.8	5.0	2.4	1.1	2.7
27	4.0	5.0	3.8	2.7	5.8	7.1	13	8.7	5.0	2.3	.97	2.8
28	4.0	4.8	3.9	2.7	6.0	7.8	13	8.6	4.7	2.1	.99	3.3
29	4.2	4.7	4.0	2.8	---	8.1	12	8.6	5.0	2.2	1.0	3.1
30	4.4	4.6	4.2	2.8	---	8.1	13	8.5	5.3	2.3	.91	3.0
31	4.4	---	4.0	2.8	---	8.8	---	8.5	---	1.8	.81	---
TOTAL	98.1	120.02	133.0	108.8	108.5	257.7	294.2	336.4	196.6	103.2	43.76	58.21
MEAN	3.16	4.00	4.29	3.51	3.88	8.31	9.81	10.9	6.55	3.33	1.41	1.94
MAX	4.4	5.7	5.4	4.5	6.0	12	13	13	8.4	4.9	3.2	3.6
MIN	1.1	.32	2.7	2.7	2.7	6.0	8.0	8.5	4.7	1.8	.78	.66
AC-FT	195	238	264	216	215	511	584	667	390	205	87	115

WTR YR 1978 TOTAL 1858.49 MEAN 5.09 MAX 13 MIN .32 AC-FT 3690

TABLE 5.—Continued

09307800 HILL CREEK ABOVE TOWAVE RESERVOIR, NEAR OURAY, UTAH—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—October 1974 to current year. Miscellaneous sediment data for water years 1975-76 given below were not previously published.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW- INSTAN- TANEDUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHMS)	PH (UNITS)	OXYGEN- DIS- SOLVED (MG/L)	OXYGEN DEMAND. CHEM- ICAL (LOW LEVEL) (MG/L)	HARD- NESS (MG/L CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT 19...	1300	4.1	3.5	670	7.3	8.3	13	330	30	74	36
NOV 16...	1140	2.3	3.5	640	7.6	9.8	--	--	--	--	--
DEC 20...	1230	2.9	.5	600	7.6	10.0	--	--	--	--	--
FEB 15...	1130	3.2	.5	625	8.0	11.4	--	--	--	--	--
MAR 28...	1330	7.2	13.5	570	--	--	--	--	--	--	--
APR 18...	1130	9.6	5.5	580	8.1	10.4	10	290	38	67	30
MAY 15...	1255	10.5	11.5	710	--	9.6	--	--	--	--	--
JUN 22...	1200	6.6	18.0	625	8.4	10.4	--	--	--	--	--
JUL 28...	1000	2.0	22.0	560	8.2	9.8	14	270	4	57	32
AUG 01...	1135	1.7	22.0	700	8.2	9.8	--	--	--	--	--
SEP 04...	1900	.91	19.5	480	--	7.2	17	310	29	65	36

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLOR- IDE, DIS- SOLVED (MG/L AS CL)
OCT 19...	28	15	.7	2.0	370	0	300	30	.3	80	5.9
NOV 16...	--	--	--	--	--	--	--	--	--	--	--
DEC 20...	--	--	--	--	--	--	--	--	--	--	--
FEB 15...	--	--	--	--	--	--	--	--	--	--	--
MAR 28...	--	--	--	--	--	--	--	--	--	--	--
APR 18...	19	12	.5	1.3	310	--	250	--	.9	70	3.4
MAY 15...	--	--	--	--	--	--	--	--	--	--	--
JUN 22...	--	--	--	--	--	--	--	--	--	--	--
JUL 28...	24	16	.6	1.4	330	0	270	3.3	--	54	4.4
AUG 01...	--	--	--	--	--	--	--	--	--	--	--
SEP 04...	29	17	.7	1.8	350	--	290	--	.0	68	4.1

DATE	FLUOR- IDE, DIS- SOLVED (MG/L AS F)	BROMIDE DIS- SOLVED (MG/L AS BR)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3)
OCT 19...	.3	.1	16	417	420	426	.57	4.64	3	.04	.18
NOV 16...	--	--	--	--	--	--	--	--	--	--	--
DEC 20...	--	--	--	--	--	--	--	--	--	--	--
FEB 15...	--	--	--	--	--	--	--	--	--	--	--
MAR 28...	--	--	--	--	--	--	--	--	--	--	--
APR 18...	.2	.1	14	338	370	359	.46	8.81	39	.00	.00
MAY 15...	--	--	--	--	--	--	--	--	--	--	--
JUN 22...	--	--	--	--	--	--	--	--	--	--	--
JUL 28...	.3	--	19	367	--	356	.50	1.65	--	.04	.18
AUG 01...	--	--	--	--	--	--	--	--	--	--	--
SEP 04...	.2	.2	13	382	--	391	.52	1.13	7	.01	.04

TABLE 5.—Continued

09307800 HILL CREEK ABOVE TOWAVE RESERVOIR, NEAR OURAY, UTAH—Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NITRO- GEN, NITRITE OIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE OIS- SOLVED (MG/L AS NO2)	NITRO- GEN, NO2+NO3 OIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA OIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA OIS- SOLVED (MG/L AS NH4)	NITRO- GEN+AM- MONIA + ORGANIC OIS- TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS TOTAL (MG/L AS PO4)	PHOS- PHORUS, ORTHO, OIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, OIS- SOLVED (MG/L AS PO4)
OCT 19...	.00	.00	.04	.03	.04	.33	.05	.15	.01	.03
NOV 16...	--	--	--	--	--	--	--	--	--	--
DEC 20...	--	--	--	--	--	--	--	--	--	--
FEB 15...	--	--	--	--	--	--	--	--	--	--
MAR 28...	--	--	--	--	--	--	--	--	--	--
APR 18...	.01	.03	.00	.00	.00	.35	.06	.18	.01	.03
MAY 15...	--	--	--	--	--	--	--	--	--	--
JUN 22...	--	--	--	--	--	--	--	--	--	--
JUL 28...	.00	.00	.04	.00	.00	.41	.08	--	.10	.31
AUG 01...	--	--	--	--	--	--	--	--	--	--
SEP 04...	.00	.00	.01	.01	.01	.40	.07	.21	.02	.06

DATE	TIME	ALUM- INUM, OIS- SOLVED (UG/L AS AL)	ARSENIC OIS- SOLVED (UG/L AS AS)	BARIUM, OIS- SOLVED (UG/L AS BA)	BORON, OIS- SOLVED (UG/L AS B)	CAESIUM OIS- SOLVED (UG/L AS CO)	CHRO- MIUM, OIS- SOLVED (UG/L AS CR)	COPPER, OIS- SOLVED (UG/L AS CU)	IRON, OIS- SOLVED (UG/L AS FE)
OCT 19...	1300	10	4	0	40	0	5	1	20
APR 18...	1130	30	4	300	30	1	0	4	30
JUL 28...	1000	0	--	--	60	--	--	--	10
SEP 04...	1900	10	5	200	40	1	10	1	30

	LEAD, OIS- SOLVED (UG/L AS PB)	LITHIUM OIS- SOLVED (UG/L AS LI)	MANGA- NESE, OIS- SOLVED (UG/L AS MN)	MERCURY OIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, OIS- SOLVED (UG/L AS MO)	SELE- NIUM, OIS- SOLVED (UG/L AS SE)	STRON- TIUM, OIS- SOLVED (UG/L AS SR)	VANA- DIUM, OIS- SOLVED (UG/L AS V)	ZINC, OIS- SOLVED (UG/L AS ZN)
OCT 19...	0	30	60	.0	1	0	800	1.4	4
APR 18...	0	20	70	.0	3	0	690	2.0	10
JUL 28...	--	20	30	--	--	--	680	--	--
SEP 04...	34	20	10	.0	3	0	810	1.7	10

DATE	TIME	GROSS ALPHA, OIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, OIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, OIS- SOLVED (PCI/L AS YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS YT-90)
OCT 19...	1300	<4.6	<.4	3.5	<.4	3.1	<.4
APR 18...	1130	<5.7	1.4	2.0	2.0	1.7	2.0
SEP 04...	1900	<3.9	<.4	2.5	<.4	2.3	<.4

DATE	TIME	CARBON, ORGANIC OIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)	CARBON, INOR- GANIC, TOTAL (MG/L AS C)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
				PHENOLS (UG/L)	
OCT 19...	1300	3.5	.4	70	2
APR 18...	1130	2.4	.6	77	19
SEP 04...	1900	7.6	.7	68	3

TABLE 5.--CONTINUED

09307800 HILL CREEK ABOVE TOWAVE RESERVOIR, NEAR OURAY, UTAH--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA
WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
BENTHIC INVERTEBRATES

DIVISIONS: .CLASS		DIVERSITY INDEX = 1.48		
..ORDER				
...FAMILY				
....GENUS				
.....SPECIES				
DATE	ORGANISM	COMMON NAME	ORGANISM COUNT	SAMPLING METHOD
OCT. 25	.INSECTA			4 SURBER SAMPLES (4 FT ² TOTAL)
	..EPHEMEROPTERA	MAYFLIES		
	...BAETIDAE			
	....BAETIS		2
	..ODONATA			
	...GOMPHIDAE	DRAGONFLIES		
	....OPHIOGOMPHUS		
	.....SEVERUS		1
	..COLEOPTERA			
	...ELMIDAE	RIFFLE BEETLES		
	....OPTIOSERVUS		9
	..DIPTERA			
	...TIPULIDAE	CRANE FLIES		
	....HEXATOMA		2
TOTAL			14	

TABLE 5.--CONTINUED

09307800 HILL CREEK ABOVE TOWAVE RESERVOIR, NEAR OURAY, UTAH--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA

WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

BENTHIC INVERTEBRATES

DIVISIONS: .CLASS		DIVERSITY INDEX = 2.40		
..ORDER				
...FAMILY				
....GENUS				
.....SPECIES				
DATE	ORGANISM	COMMON NAME	ORGANISM COUNT	SAMPLING METHOD
MAY 23	.INSECTA			4 SURBER SAMPLES (4 FT ² TOTAL)
	..ODONATA			
	...GOMPHIDAE	DRAGONFLIES		
	....OPHIOGOMPHUS		
	.....SEVERUS		3
	..PLECOPTERA	STONEFLIES		
	...PERLODIDAE			
	....ISOPERLA		
	.....MORMONA		2
	..HEMIPTERA			
	...NOTONECTIDAE	BACKSWIMMERS		
	....NOTONECTA		1
	..COLEOPTERA			
	...ELMIDAE	RIFFLE BEETLES		
	....OPTIOSERVUS		2
	..TRICHOPTERA	CADDISFLIES		
	...HYDROPSYCHIDAE			
	....HYDROPSYCHE		10
	..DIPTERA			
	...TIPULIDAE	CRANE FLIES		
	....HEXATOMA		3
	.CRUSTACEA			
	..DECAPODA			
	...ASTACIDAE			
	....PACIFASTACUS		2
TOTAL			23	

TABLE 5.--CONTINUED

09307800 HILL CREEK ABOVE TOWAVE RESERVOIR, NEAR OURAY, UTAH--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA

WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

BENTHIC INVERTEBRATES

DIVISIONS: .CLASS		DIVERSITY INDEX = 2.92		
..ORDER				
...FAMILY				
....GENUS				
.....SPECIES				
DATE	ORGANISM	COMMON NAME	ORGANISM COUNT	SAMPLING METHOD
JULY 28	.INSECTA			4 SURBER SAMPLES (4 FT ² TOTAL)
	..EPHEMEROPTERA	MAYFLIES		
	...HEPTAGENIIDAE			
	....HEPTAGENIA		5
	...LEPTOPHLEBIIDAE			
	....CHOROTERPES		1
	...BAETIDAE			
	....BAETIS		1
	...TRICORYTHIDAE			
	....TRICORYTHODES		5
	..ODONATA			
	...GOMPHIDAE	DRAGONFLIES		
	....OPHIOGOMPHUS		
	.....SEVERUS		1
	..PLECOPTERA	STONEFLIES		
	...PERLODIDAE			
	....ISOPERLA		
	....MORMONA		1
	..COLEOPTERA			
	...ELMIDAE	RIFFLE BEETLES		
	....OPTIOSERVUS		1
	..TRICOPTERA	CADDISFLIES		
	...HYDROPSYCHIDAE			
	....HYDROPSYCHE		3
	..DIPTERA			
	...CHIRONOMIDAE	MIDGES		
	....PSEUDODIAMESA		1
	.CRUSTACEA			
	..DECAPODA			
	...ASTACIDAE			
	....PACIFASTACUS		1
	TOTAL		20	

09307800 HILL CREEK ABOVE TOWAVE RESERVOIR, NEAR OURAY, UTAH—Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	STREAM- FLOW, INSTAN- TANEDUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM
NOV												
18...	1615	6.8	2.0	31	.57	--	--	--	--	--	--	--
DEC												
10...	1230	2.7	.0	15	.11	--	--	--	--	--	--	--
JAN												
20...	1450	5.9	.5	116	1.9	45	58	--	98	99	99	100
FEB												
19...	1316	4.4	.0	167	2.0	--	--	--	--	--	--	--
MAR												
18...	1420	8.2	1.5	179	4.0	23	34	56	96	99	100	--
APR												
16...	1215	12	5.5	214	6.9	20	26	--	84	97	100	--
MAY												
20...	1440	33	11.0	380	34	22	26	38	80	94	100	--
JUN												
17...	1745	31	15.5	48	4.0	--	--	--	--	--	--	--
JUL												
22...	1530	14	24.0	66	2.5	--	--	--	--	--	--	--
AUG												
18...	1850	7.4	19.5	113	2.3	--	--	--	--	--	--	--
SEP												
22...	1745	7.4	11.5	30	.60	--	--	--	--	--	--	--

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	STREAM- FLOW, INSTAN- TANEDUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM
OCT											
21...	1630	8.7	6.5	13	.31	--	--	--	--	--	--
DEC											
18...	1630	6.6	.0	34	.61	--	--	--	--	--	--
JAN											
21...	1645	6.6	.5	242	4.3	--	--	--	--	--	--
FEB											
18...	1130	4.0	.0	661	7.2	--	--	--	--	--	--
MAR											
16...	1000	4.8	1.0	253	3.3	--	--	--	--	--	--
APR											
21...	1130	12	--	366	12	11	17	32	92	99	100
MAY											
19...	1330	15	14.0	94	3.8	--	--	--	--	--	--
JUN											
23...	1130	12	15.5	105	3.4	--	--	--	--	--	--
SEP											
14...	1400	7.9	14.0	165	3.5	--	--	--	--	--	--

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEDUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
APR					
18...	1200	9.6	5.5	80	2.1
AUG					
01...	1100	1.5	22.0	72	.29

TABLE 5.—Continued

09307900 HILL CREEK NEAR MOUTH, NEAR OURAY, UTAH

LOCATION.—Lat 39°52'35", long 109°42'12", in SE1/4SE1/4NW1/4 sec.8, T.11 S., R.20 E., Uintah County, Uintah and Ouray Indian Reservation, Hydrologic Unit 14060006, on right bank 5.9 mi (9.5 km) upstream from mouth and 15 mi (24 km) south of Ouray.

DRAINAGE AREA.—288 mi² (746 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1974 to current year.

GAGE.—Water-stage recorder and concrete control. Altitude of gage is 5,080 ft (1,548 m) from topographic map.

REMARKS.—Records good.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 201 ft³/s (5.69 m³/s) Aug. 1, 1976, gage height, 4.4 ft (1.34 m), from slope-area measurement of peak flow; maximum gage height, 4.84 ft (1.475 m) May 17, 1975; no flow for many days each year.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 6.9 ft³/s (0.20 m³/s) Oct. 7, gage height, 2.25 ft (0.686 m); no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.03	3.8	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.15	3.9	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	3.7	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.11	3.8	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	1.1	2.5	.00	.00	.00	.00
6	.01	.00	.00	.00	.00	.00	4.6	2.6	.00	.00	.00	.00
7	1.7	.00	.00	.00	.00	.00	3.5	2.8	.00	.00	.00	.00
8	.37	.00	.00	.00	.00	.00	2.7	3.9	.00	.00	.00	.00
9	.14	.00	.00	.00	.00	.00	2.3	2.4	.00	.00	.00	.00
10	.03	.00	.00	.00	.00	.00	2.0	2.3	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	1.8	2.1	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.29	1.6	1.8	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.60	1.6	1.7	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.53	2.1	1.4	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.07	2.0	.33	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	2.1	.01	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.23	2.4	.08	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.13	2.3	.13	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	2.5	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	2.8	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	2.5	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.02	2.3	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.27	2.2	.28	.43	.00	.00	.00
24	.00	.00	.00	.00	.00	.45	1.9	.17	1.2	.00	.00	.00
25	.00	.00	.00	.00	.00	.53	1.9	.00	1.6	.00	.00	.00
26	.00	.00	.00	.00	.00	.56	2.0	.00	1.9	.00	.00	.00
27	.00	.00	.00	.00	.00	.43	2.8	.00	2.1	.00	.00	.00
28	.00	.00	.00	.00	.00	.10	3.3	.00	1.7	.00	.00	.00
29	.00	.00	.00	.00	---	.00	3.2	.00	.29	.00	.00	.00
30	.00	.00	.00	.00	---	.00	3.7	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	2.25	.00	.00	.00	.00	4.21	63.49	39.70	9.22	.00	.00	.00
MEAN	.073	.000	.000	.000	.000	.14	2.12	1.28	.31	.000	.000	.000
MAX	1.7	.00	.00	.00	.00	.60	4.6	3.9	2.1	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	4.5	.00	.00	.00	.00	8.4	126	79	18	.00	.00	.00
WTR YR 1978	TOTAL 118.87	MEAN .33	MAX 4.6	MIN .00	AC-FT 236							

TABLE 5.—Continued

09307900 HILL CREEK NEAR MOUTH, NEAR OURAY, UTAH—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—February 1975 to current year. Miscellaneous sediment data for water years 1975-76 given below were not previously published.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEDUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	OXYGEN, OIS- SOLVED (MG/L)	DXYGEN DEMAND, CHEM- ICAL (LDW LEVEL) (MG/L)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM OIS- SDLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	
APR 17...	1230	2.4	4.0	1220	10.2	30	490	110	66	79	
DATE	TIME	SODIUM, DIS- SDLVED (MG/L AS NA)	SODIUM- PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SDLVED (MG/L AS K)	BICAR- BDNATE (MG/L AS HCO3)	ALKA- LINITY (MG/L AS CACD3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS- SDLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SDLVED (MG/L AS CL)	FLUD- RIDE, DIS- SDLVED (MG/L AS F)
APR 17...	130	36	2.6	4.0	460	380	.1	320	18	.6	
DATE	TIME	BROMIDE DIS- SDLVED (MG/L AS BR)	SILICA, DIS- SDLVED (MG/L AS SiO2)	SDIDS, RESIDUE AT 180 DEG. C DIS- SDLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, OIS- SDLVED (MG/L)	SDIDS, SUM OF CONSTI- TUENTS, DIS- SDLVED (MG/L)	SDIDS, OIS- SDLVED (TONS PER AC-FT)	SDIDS, DIS- SDLVED (TONS PER DAY)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDE (MG/L)	NITRO- GEN, NITRATE DIS- SDLVED (MG/L AS N)	NITRO- GEN, NITRATE DIS- SDLVED (MG/L AS NO3)
APR 17...	.2	16	815	840	863	1.11	5.37	86	.00	.00	
DATE	TIME	NITRO- GEN, NITRITE DIS- SDLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SDLVED (MG/L AS NO2)	NITRO- GEN, NO2+NO3 DIS- SDLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SDLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SDLVED (MG/L AS NH4)	NITRO- GEN+AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS TOTAL (MG/L AS PO4)	PHOS- PHORUS, DRTHD, DIS- SDLVED (MG/L AS P)	PHOS- PHATE, DRTHD, OIS- SDLVED (MG/L AS PO4)
APR 17...	.01	.03	.00	.00	.00	.65	.12	.37	.01	.03	
DATE	TIME	ALUM- INUM, OIS- SDLVED (UG/L AS AL)	ARSENIC DIS- SDLVED (UG/L AS AS)	BARIUM, DIS- SDLVED (UG/L AS BA)	BORDN, DIS- SDLVED (UG/L AS B)	CADMIUM DIS- SDLVED (UG/L AS CD)	CHRD- MIUM, DIS- SDLVED (UG/L AS CR)	COPPER, DIS- SDLVED (UG/L AS CU)	IRON, DIS- SDLVED (UG/L AS FE)		
APR 17...	1230	0	11	300	1000	1	0	4	50		
DATE	TIME	LEAD, DIS- SDLVED (UG/L AS PB)	LITHIUM DIS- SDLVED (UG/L AS LI)	MANGA- NESE, DIS- SDLVED (UG/L AS MN)	MERCURY DIS- SDLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SDLVED (UG/L AS MO)	SELE- NIUM, DIS- SDLVED (UG/L AS SE)	STRON- TIUM, DIS- SDLVED (UG/L AS SR)	VANA- OIUM, OIS- SDLVED (UG/L AS V)	ZINC, DIS- SDLVED (UG/L AS ZN)	
APR 17...	0	40	0	.0	36	1	1300	4.0	10		
DATE	TIME	GROSS ALPHA, DIS- SDLVED (UG/L AS U-NAT)	GROSS ALPHA, BETA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, OIS- SDLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, OIS- SDLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	
APR 17...	1230	<11	3.6	6.3	4.5	5.7	4.1				

09307900 HILL CREEK NEAR MOUTH, NEAR OURAY, UTAH--Continued

WATER QUALITY DATA. WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)	CARBON, INOR- GANIC, TOTAL (MG/L AS C)	PHENOLS (UG/L)
APR 17...	1230	9.2	1.0	150	2

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM
FEB 18...	1030	2.4	.0	29	.19	--	--	--	--	--	--
MAR 06...	1900	9.2	5.5	13500	335	36	42	82	99	--	100
18...	1325	6.3	3.0	1900	32	26	35	77	97	100	--
26...	1645	8.4	3.0	2720	62	33	36	71	98	100	--
APR 10...	1200	6.8	4.0	1520	28	20	29	63	95	100	--
16...	1220	7.5	5.0	1620	33	21	28	71	96	99	100
MAY 13...	1340	7.1	16.0	1090	21	29	34	64	95	100	--
JUN 11...	1930	36	21.0	2960	288	40	45	71	95	98	100
JUL 24...	1200	6.8	18.5	347	6.4	36	62	93	98	99	100
AUG 20...	1155	4.3	14.5	80	.93	--	--	--	--	--	--

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)
OCT 24...	1130	3.1	.5	112	.94
NOV 21...	1300	.03	1.0	180	.01
DEC 15...	1400	1.6	--	80	.35
FEB 27...	1400	13	1.0	618	22
MAR 15...	1140	13	.5	1500	53
APR 27...	1100	11	5.5	937	28
MAY 20...	1430	4.8	18.5	367	4.8
JUN 22...	1200	.04	18.0	228	.02
AUG 04...	1315	.70	20.0	205	.39

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)
APR 17...	1300	2.4	4.0	220	1.4

TABLE 5.—Continued

09308000 WILLOW CREEK NEAR OURAY, UTAH

LOCATION.—Lat 39°56'20", long 109°38'52", in NE1/4NW1/4NE1/4 sec.22, T.10 S., R.20 E., Uintah County, Hydrologic Unit 14060006, on left bank 0.3 mi (0.5 km) upstream from Black Bridge, 1.6 mi (2.6 km) downstream from Hill Creek, and 10 mi (16 km) south of Ouray.

DRAINAGE AREA.—897 mi² (2,323 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—July 1947 to September 1955, October 1974 to current year. Annual maximums, water years 1960–68.

GAGE.—Water-stage recorder and concrete control. Altitude of gage is 4,860 ft (1,481 m) from topographic map. Prior to October 1974 at different sites and datums.

REMARKS.—Records good except those for winter period, which are fair. Diversions for irrigation above station.

AVERAGE DISCHARGE.—12 years (water years 1948–55, 1975–78) 23.5 ft³/s (0.666 m³/s), 17,000 acre-ft/yr (21.0 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 11,000 ft³/s (312 m³/s) February 1962, gage height, 17.73 ft (5.404 m), site and datum then in use, estimated; no flow at times.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 48 ft³/s (1.36 m³/s) May 1, gage height, 2.87 ft (0.875 m); maximum gage height, 4.13 ft (1.259 m) Feb. 6 (result of ice jam); no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND. WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	13	12	11	9.4	16	26	37	12	.00	.00	.00
2	1.5	12	13	10	9.2	16	30	39	11	.00	.00	.00
3	1.4	12	14	11	9.0	16	27	36	11	.00	.00	.00
4	1.0	13	15	11	9.2	16	25	33	11	.00	.00	.00
5	.91	12	15	12	9.5	16	23	34	8.4	.00	.00	.00
6	1.3	13	13	12	10	17	25	34	7.1	.00	.00	.00
7	5.6	15	12	12	10	19	26	34	9.5	.00	.00	.00
8	12	15	11	12	10	19	26	33	10	.00	.00	.00
9	9.1	12	12	12	10	18	29	29	7.6	.00	.00	.00
10	7.6	10	12	12	12	19	29	28	5.6	.00	.00	.00
11	6.0	13	12	12	12	18	25	30	4.3	.00	.00	.00
12	1.7	14	13	12	12	20	26	30	1.7	.00	.00	.00
13	1.5	14	13	11	11	17	33	29	1.0	.00	.00	.00
14	2.5	13	14	12	11	14	35	26	1.1	.00	.00	.00
15	2.7	13	14	13	11	15	31	25	1.3	.00	.00	.00
16	3.1	13	14	14	11	13	30	26	1.9	.00	.00	.00
17	1.3	12	13	14	11	12	33	28	.95	.00	.00	.00
18	1.4	13	13	13	11	13	26	25	.79	.38	.00	.00
19	1.8	15	11	12	13	13	22	23	.78	.00	.00	.00
20	2.7	9.5	10	12	15	17	24	22	.75	.00	.00	.00
21	2.5	9.0	9.0	12	15	17	28	22	.60	.00	.00	.00
22	2.7	9.4	9.2	11	15	18	30	24	.27	.00	.00	.00
23	3.1	10	10	10	15	19	24	23	.69	.00	.00	.00
24	4.0	11	12	9.0	15	20	25	22	.04	.00	.00	.00
25	5.6	15	13	9.6	16	20	25	20	.00	.00	.00	.00
26	4.0	17	13	9.5	16	18	24	19	.00	.00	.00	.00
27	5.6	16	13	9.2	16	18	29	18	.18	.00	.00	.00
28	4.8	15	13	9.0	16	19	36	17	.92	.00	.00	.00
29	6.3	14	13	9.5	---	20	32	16	.46	.00	.00	.00
30	11	13	14	9.5	---	21	37	15	.00	.00	.00	.00
31	11	---	12	9.5	---	22	---	14	---	.00	.00	---
TOTAL	127.91	385.9	387.2	347.8	340.3	536	841	811	110.93	.38	.00	.00
MEAN	4.13	12.9	12.5	11.2	12.2	17.3	28.0	26.2	3.70	.012	.000	.000
MAX	12	17	15	14	16	22	37	39	12	.38	.00	.00
MIN	.91	9.0	9.0	9.0	9.0	12	22	14	.00	.00	.00	.00
AC-FT	254	765	768	690	675	1060	1670	1610	220	.8	.00	.00
WTR YR 1978	TOTAL	3888.42	MEAN	10.7	MAX	39	MIN	.00	AC-FT	7710		

WATER-QUALITY RECORDS

PERIOD OF RECORD.—October 1974 to current year. Miscellaneous sediment data for water years 1975-76 given below were not previously published.

PERIOD OF DAILY RECORD.—

SPECIFIC CONDUCTANCE: October 1976 to September 1978 (discontinued).

WATER TEMPERATURES: October 1976 to September 1978 (discontinued).

SUSPENDED-SEDIMENT DISCHARGE: October 1974 to current year.

REMARKS.—Specific-conductance and water-temperature recorders were not operated during the winter period. Sediment record computed based on concentrations collected once daily by observer and periodically by U.S. P.S. 69 automatic sediment sampler.

EXTREMES FOR PERIOD OF RECORD.—

SPECIFIC CONDUCTANCE: Maximum recorded (more than 20 percent missing record), 10,200 micromhos June 22, 1978; minimum recorded, 950 micromhos Feb. 23, 1977.

WATER TEMPERATURES: Maximum recorded (more than 20 percent missing record), 34°C June 26, 1977; minimum, 0.0°C many days during winter periods.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 82,700 mg/L July 22, 1977; no flow for several days most years.

SEDIMENT LOADS: Maximum daily, 49,400 tons (44,800 tonnes) July 20, 1977; 0 tons many days most years.

EXTREMES FOR CURRENT YEAR.—

SPECIFIC CONDUCTANCE: Maximum recorded (more than 20 percent missing record), 10,200 micromhos June 22; minimum daily, 1,100 micromhos May 16.

WATER TEMPERATURES: Maximum recorded (more than 20 percent missing record), 31°C June 21, 23; minimum, 0.0°C many days during winter period.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 25,800 mg/L Mar. 7; no flow for several days.

SEDIMENT LOADS: Maximum daily 1,410 tons (1,280 tonnes) Apr. 2; 0 tons many days.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	OXYGEN, OIS- SOLVED (MG/L)	OXYGEN DEMANO- CHEM- ICAL (LOW LEVEL) (MG/L)	HARO- NESS (MG/L AS CACO3)	HARO- NESS, NONCAR- BONATE (MG/L AS CACO3)	CALCIUM OIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, OIS- SOLVED (MG/L AS MG)
OCT 27...	1500	8.2	11.5	2800	8.4	9.1	54	800	140	89	140
NOV 17...	1445	12	5.0	1500	--	9.4	--	--	--	--	--
JAN 31...	0800	9.5	.5	1700	--	9.6	20	560	100	84	85
FEB 23...	1635	18	3.5	1400	7.4	9.2	--	--	--	--	--
MAR 08...	1650	20	5.5	1390	--	9.4	--	--	--	--	--
APR 19...	1500	22	12.0	1300	--	9.2	120	440	82	83	55
MAY 16...	1205	27	14.5	1100	--	10.4	--	--	--	--	--
JUN 20...	0935	.74	18.0	4800	8.7	7.4	--	--	--	--	--

DATE	SODIUM, OIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	CARBON DIOXIDE OIS- SOLVED (MG/L AS CO2)	SULFIDE TOTAL (MG/L AS S)	SULFATE OIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, OIS- SOLVED (MG/L AS CL)
OCT 27...	490	57	7.5	5.9	780	14	660	5.1	.5	1100	46
NOV 17...	--	--	--	--	--	--	--	--	--	--	--
JAN 31...	230	47	4.2	3.5	560	--	460	--	--	520	21
FEB 23...	--	--	--	--	--	--	--	--	--	--	--
MAR 08...	--	--	--	--	--	--	--	--	--	--	--
APR 19...	130	39	2.7	2.9	430	--	350	--	.5	320	26
MAY 16...	--	--	--	--	--	--	--	--	--	--	--
JUN 20...	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.—Continued

09308000 WILLOW CREEK NEAR OURAY, UTAH—Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	FLUO- RIDE, OIS- SOLVED (MG/L AS F)	BROMIDE DIS- SOLVED (MG/L AS BR)	SILICA, OIS- SOLVED (MG/L AS SI02)	SOLIOS, RESIDUE AT 180 DEG. C OIS- SOLVED (MG/L)	SOLIOS, RESIDUE AT 105 DEG. C, DIS- SOLVED (MG/L)	SOLIOS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIOS, DIS- SOLVED (TONS PER AC-FT)	SOLIOS, DIS- SOLVED (TONS PER DAY)	SOLIOS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRATE OIS- SOLVED (MG/L AS NO3)
OCT 27...	1.0	.7	15	2290	2300	2290	3.11	50.7	97	.02	.09
NOV 17...	--	--	--	--	--	--	--	--	--	--	--
JAN 31...	.7	--	18	1210	--	1240	1.65	31.0	--	.39	1.7
FEB 23...	--	--	--	--	--	--	--	--	--	--	--
MAR 08...	--	--	--	--	--	--	--	--	--	--	--
APR 19...	.5	.2	15	861	830	850	1.17	51.1	1800	.61	2.7
MAY 16...	--	--	--	--	--	--	--	--	--	--	--
JUN 20...	--	--	--	--	--	--	--	--	--	--	--

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2)	NITRO- GEN, NO2+NO3 OIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA OIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA OIS- SOLVED (MG/L AS NH4)	NITRO- GEN+AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS TOTAL (MG/L AS P04)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS P04)
OCT 27...	.00	.00	.02	.04	.05	1.0	.14	.43	.01	.03
NOV 17...	--	--	--	--	--	--	--	--	--	--
JAN 31...	.01	.03	.40	.08	.10	.37	.15	--	.06	.18
FEB 23...	--	--	--	--	--	--	--	--	--	--
MAR 08...	--	--	--	--	--	--	--	--	--	--
APR 19...	.02	.07	.63	.00	.00	3.0	1.5	4.6	.01	.03
MAY 16...	--	--	--	--	--	--	--	--	--	--
JUN 20...	--	--	--	--	--	--	--	--	--	--

DATE	TIME	ALUM- INUM, OIS- SOLVED (UG/L AS AL)	ARSENIC OIS- SOLVED (UG/L AS AS)	BARIUM, OIS- SOLVED (UG/L AS BA)	BORON, OIS- SOLVED (UG/L AS B)	CADMIUM OIS- SOLVED (UG/L AS CO)	CHRO- MIUM, OIS- SOLVED (UG/L AS CR)	COPPER, OIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)
OCT 27...	1500	30	58	0	3200	0	10	5	40
JAN 31...	0800	10	--	--	1200	--	--	--	50
APR 19...	1500	10	9	300	780	1	0	3	20

TABLE 5.—Continued

09308000 WILLOW CREEK NEAR OURAY, UTAH—Continued

WATER QUALITY DATA. WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM OIS- SOLVED (UG/L AS LI)	MANGA- NESE, OIS- SOLVED (UG/L AS MN)	MERCURY OIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, OIS- SOLVED (UG/L AS MO)	SELE- NIUM, OIS- SOLVED (UG/L AS SE)	STRON- TIUM, OIS- SOLVED (UG/L AS SR)	VANA- DIUM, OIS- SOLVED (UG/L AS V)	ZINC, OIS- SOLVED (UG/L AS ZN)
OCT 27...	0	70	50	.0	38	2	1900	13	10
JAN 31...	--	30	10	--	--	--	1400	--	--
APR 19...	1	20	10	.0	17	1	1100	6.0	10

DATE	TIME	GROSS ALPHA. DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA. SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, OIS- SOLVED (PC/L AS CS-137)	GROSS BETA, OIS- SUSP. TOTAL (PC/L AS CS-137)	GROSS BETA, OIS- SOLVED (PC/L AS YT-90)	GROSS BETA, OIS- SUSP. TOTAL (PC/L AS YT-90)
OCT 27...	1500	<22	3.3	11	4.3	9.5	4.1
APR 19...	1500	<7.6	76	4.6	68	4.2	45

DATE	TIME	CARBON, ORGANIC OIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENEO TOTAL (MG/L AS C)	CARBON, INOR- GANIC, TOTAL (MG/L AS C)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT 27...	1500	19	<5.0	153	3	.10
JAN 31...	0800	--	--	110	--	--
APR 19...	1500	6.4	--	130	2	.00

TABLE 5.--CONTINUED

09308000 WILLOW CREEK NEAR OURAY, UTAH--CONTINUED

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA

WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

BENTHIC INVERTEBRATES

DIVISIONS: .CLASS		DIVERSITY INDEX = 2.35		
..ORDER				
...FAMILY				
....GENUS				
.....SPECIES				
DATE	ORGANISM	COMMON NAME	ORGANISM COUNT	SAMPLING METHOD
MAY 23	.INSECTA			4 SURBER SAMPLES (4 FT ² TOTAL)
	..EPHEMEROPTERA	MAYFLIES		
	...HEPTAGENIIDAE			
	....HEPTAGENIA		18
	...BAETIDAE			
	....BAETIS		9
	..PLECOPTERA	STONEFLIES		
	...NEMOURIDAE			
	....AMPHINEMURA		3
	..COLEOPTERA			
	...DYTISCIDAE			
	....DERONECTES		8
	..TRICHOPTERA	CADDISFLIES		
	...LIMNephilidae			
	....HESPEROPHYLAX		1
	..DIPTERA			
	...TIPULIDAE	CRANE FLIES		
	....HEXATOMA		1
	....TIPULA		1
	...CHIRONOMIDAE	MIDGES		
	....PHAENOPSECTRA		1
	....CRICOTOPUS		1
TOTAL			43	

TABLE 5.—Continued

09308000 WILLOW CREEK NEAR OURAY, UTAH—Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	---	---	---	1960	1800	1850						
2	---	---	---	1850	1670	1750						
3	---	---	---	1790	1550	1680						
4	---	---	---	1760	1500	1630						
5	---	---	---	1650	1550	1600						
6	---	---	---	1680	1480	1590						
7	---	---	---	1500	1460	1470						
8	---	---	---	1470	1450	1460						
9	---	---	---	1560	1440	1480						
10	---	---	---	1870	1570	1720						
11	---	---	---	1890	1810	1850						
12	---	---	---	1820	1520	1640						
13	---	---	---	1570	1490	1540						
14	---	---	---	1560	1500	1530						
15	---	---	---	1580	1540	1570						
16	---	---	---	1590	1530	1570						
17	---	---	---	1560	1500	1540						
18	---	---	---	---	---	---						
19	---	---	---	---	---	---						
20	---	---	---	---	---	---						
21	---	---	---	---	---	---						
22	2920	2720	2810	---	---	---						
23	2880	2640	2750	---	---	---						
24	3120	2760	2900	---	---	---						
25	3080	2440	2720	---	---	---						
26	2660	2180	2390	---	---	---						
27	3180	2320	2790	---	---	---						
28	3130	2350	2690	---	---	---						
29	3160	2360	2950	---	---	---						
30	2360	2060	2200	---	---	---						
31	2070	1970	2040	---	---	---						
MONTH	3180	1970	2620	1960	1440	1620						

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
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19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
MONTH												

TABLE 5.—Continued

09308000 WILLOW CREEK NEAR OURAY, UTAH—Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	---								
2	---	---	---	---								
3	---	---	---	---								
4	---	---	---	---								
5	---	---	---	---								
6	---	---	---	---								
7	---	---	---	---								
8	---	---	---	---								
9	---	---	---	---								
10	---	---	---	---								
11	---	---	---	---								
12	---	---	---	---								
13	---	---	---	---								
14	---	---	---	---								
15	---	---	---	---								
16	---	---	---	---								
17	---	---	---	---								
18	---	---	---	7440								
19	---	---	---	---								
20	7460	---	---	---								
21	7700	4660	5790	---								
22	10200	---	---	---								
23	7520	---	---	---								
24	9480	---	---	---								
25	---	---	---	---								
26	---	---	---	---								
27	7720	---	---	---								
28	6780	4660	5440	---								
29	6800	---	---	---								
30	---	---	---	---								
31	---	---	---	---								
MONTH	10200	4660	5620	7440								
YEAR	10200	1440	2240									

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	16.5	4.5	9.5	6.5	2.0	4.0						
2	17.0	5.0	10.5	7.0	2.0	4.0						
3	19.0	8.0	12.5	7.0	2.0	4.0						
4	19.5	7.5	13.0	8.5	3.5	5.5						
5	19.0	12.0	15.0	8.5	5.0	6.5						
6	19.0	11.0	14.0	7.5	6.5	7.0						
7	15.0	9.0	11.5	9.5	6.0	7.5						
8	13.0	4.5	8.5	7.0	2.0	4.0						
9	13.0	6.0	9.0	2.0	1.0	1.0						
10	11.5	6.0	8.5	1.5	1.0	1.0						
11	12.0	3.5	7.5	1.5	.5	1.0						
12	13.0	3.0	7.5	4.5	.5	2.0						
13	14.5	4.0	8.5	4.0	1.0	2.5						
14	15.0	5.0	9.0	4.5	1.0	2.5						
15	15.0	5.5	9.5	5.5	2.0	3.5						
16	15.0	5.5	9.5	6.0	2.5	4.0						
17	15.5	6.0	10.0	5.0	---	---						
18	15.0	5.5	9.5	---	---	---						
19	15.0	5.0	9.5	---	---	---						
20	14.5	8.0	10.5	---	---	---						
21	16.0	9.0	11.5	---	---	---						
22	15.0	6.5	10.0	---	---	---						
23	14.0	5.5	9.0	---	---	---						
24	13.0	5.5	8.5	---	---	---						
25	11.5	4.5	8.0	---	---	---						
26	12.5	4.5	8.0	---	---	---						
27	12.0	4.5	8.0	---	---	---						
28	13.0	6.0	9.5	---	---	---						
29	13.5	8.0	10.5	---	---	---						
30	10.5	7.0	8.5	---	---	---						
31	7.5	4.5	5.5	---	---	---						
MONTH	19.5	3.0	9.5	9.5	.5	4.0						

TABLE 5.—Continued

09308000 WILLOW CREEK NEAR OURAY, UTAH—Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---									
2	---	---	---									
3	---	---	---									
4	---	---	---									
5	---	---	---									
6	---	---	---									
7	---	---	---									
8	---	---	---									
9	---	---	---									
10	---	---	---									
11	---	---	---									
12	---	---	---									
13	---	---	---									
14	---	---	---									
15	---	---	---									
16	---	---	---									
17	---	---	---									
18	---	---	---									
19	---	---	---									
20	30.0	---	---									
21	31.0	13.5	21.5									
22	---	13.5	---									
23	31.0	15.0	22.0									
24	---	---	---									
25	---	---	---									
26	---	---	---									
27	---	---	---									
28	28.0	14.5	---									
29	---	---	---									
30	---	---	---									
31	---	---	---									
MONTH	31.0	13.5	22.0									
YEAR	31.0	5	8.0									

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
MONTH												

09308000 WILLOW CREEK NEAR OURAY, UTAH—Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)
OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	38	.23	294	10	746	24	400	12	347	8.8	3010	130
2	88	.36	427	14	2590	91	405	11	314	7.8	4210	182
3	128	.48	630	20	1140	43	408	12	625	15	4900	212
4	63	.17	680	24	1270	51	321	9.5	477	12	5600	242
5	52	.13	760	25	859	35	228	7.4	485	12	10300	445
6	1350	4.7	820	29	1450	51	237	7.7	373	10	20300	932
7	8000	121	830	34	1330	43	241	7.8	382	10	25800	1320
8	8800	285	860	35	2270	67	234	7.6	880	24	12500	641
9	2200	54	920	30	934	30	202	6.5	327	8.8	8500	413
10	1430	29	960	26	643	21	243	7.9	1240	40	9800	451
11	710	12	1390	49	661	21	229	7.4	433	14	11000	535
12	340	1.6	1690	64	417	15	280	9.1	415	13	10200	551
13	300	1.2	1110	42	416	15	279	8.3	332	9.9	8600	395
14	350	2.4	845	30	417	16	252	8.2	269	8.0	5250	198
15	390	2.8	900	32	1280	48	293	10	533	16	4050	164
16	140	1.2	945	33	995	38	408	15	265	7.9	3330	117
17	130	.46	750	24	549	19	231	8.7	336	10	3720	121
18	210	.79	1000	35	550	19	304	11	338	10	4250	149
19	120	.58	1090	44	314	9.3	265	8.6	527	18	4880	171
20	270	2.0	860	22	312	8.4	259	8.4	375	15	6100	280
21	158	1.1	555	13	300	7.3	333	11	860	35	4880	224
22	120	.87	565	14	335	8.3	241	7.2	469	19	4930	240
23	124	1.0	930	25	398	11	234	6.3	421	17	5890	302
24	147	1.6	1030	31	410	13	807	20	1630	66	5930	320
25	177	2.7	820	33	360	13	755	20	521	23	4850	262
26	119	1.3	1300	60	330	12	925	24	1250	54	3670	178
27	117	1.8	2040	88	468	16	400	9.9	2780	120	4120	200
28	83	1.1	1620	66	413	14	373	9.1	1470	64	4130	212
29	137	2.3	1180	45	637	22	333	8.5	---	---	4520	244
30	360	11	1110	39	493	19	343	8.8	---	---	4730	268
31	300	8.9	---	---	396	13	345	8.8	---	---	6200	368
TOTAL	---	553.77	---	1036	---	813.3	---	317.7	---	668.2	---	10467

DAY	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	15100	1060	5350	534	1010	33	---	.00	---	.00	---	.00
2	17400	1410	5340	562	870	26	---	.00	---	.00	---	.00
3	8990	655	4860	472	820	24	---	.00	---	.00	---	.00
4	4380	296	3730	332	870	26	---	.00	---	.00	---	.00
5	3600	224	3500	321	930	21	---	.00	---	.00	---	.00
6	5080	343	3050	280	960	18	---	.00	---	.00	---	.00
7	5160	362	3060	281	1230	32	---	.00	---	.00	---	.00
8	3980	279	2930	261	1220	33	---	.00	---	.00	---	.00
9	4450	348	2550	200	870	18	---	.00	---	.00	---	.00
10	4020	315	2290	173	520	7.9	---	.00	---	.00	---	.00
11	3720	251	2800	227	410	4.8	---	.00	---	.00	---	.00
12	3680	258	3630	294	147	.67	---	.00	---	.00	---	.00
13	5630	502	3100	243	64	.17	---	.00	---	.00	---	.00
14	6120	578	2320	163	79	.23	---	.00	---	.00	---	.00
15	4130	346	2840	192	87	.31	---	.00	---	.00	---	.00
16	4320	350	3050	214	107	.55	---	.00	---	.00	---	.00
17	4730	421	4000	302	53	.14	---	.00	---	.00	---	.00
18	3050	214	2850	192	10	.02	40	.04	---	.00	---	.00
19	2220	132	2290	142	12	.03	---	.00	---	.00	---	.00
20	2880	187	2000	119	10	.02	---	.00	---	.00	---	.00
21	3680	278	2360	140	20	.03	---	.00	---	.00	---	.00
22	4000	324	2700	175	37	.03	---	.00	---	.00	---	.00
23	3040	197	2650	165	48	.09	---	.00	---	.00	---	.00
24	2500	169	2120	126	10	.00	---	.00	---	.00	---	.00
25	2830	191	1590	86	---	.00	---	.00	---	.00	---	.00
26	3950	256	1620	83	---	.00	---	.00	---	.00	---	.00
27	4690	367	1480	72	40	.02	---	.00	---	.00	---	.00
28	6670	648	1520	70	60	.15	---	.00	---	.00	---	.00
29	5370	464	1530	66	30	.04	---	.00	---	.00	---	.00
30	5380	537	1270	51	---	.00	---	.00	---	.00	---	.00
31	---	---	1330	50	---	---	---	.00	---	.00	---	.00
TOTAL	---	11962	---	6588	---	246.20	---	0.04	---	0.00	---	0.00
TOTAL LOAD FOR YEAR: 32652.21 TONS.												

TABLE 5.--Continued

09308000 WILLOW CREEK NEAR OURAY, UTAH--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	STREAM- FLOW, INSTAN- TANEDUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM
OCT 04...	1130	8.6	10.0	681	16	41	48	--	63	69	89	100
NOV 20...	1400	15	3.0	2020	82	34	48	75	91	94	99	100
DEC 09...	1530	4.6	.5	231	2.9	43	57	--	97	98	100	--
JAN 22...	1700	16	.5	382	17	41	60	--	86	88	98	100
FEB 18...	1355	16	.0	2190	95	28	39	70	91	95	99	100
MAR 06...	1630	42	.0	20800	2360	33	36	63	93	98	99	100
APR 17...	1540	26	6.0	4520	317	33	36	68	95	99	100	--
MAY 26...	1505	30	4.0	4320	350	35	36	70	93	97	99	100
JUN 10...	1430	25	7.5	2910	196	22	29	68	93	98	100	--
JUL 16...	1600	24	10.5	4420	286	29	36	71	94	97	100	--
AUG 13...	1800	53	19.0	9150	1310	29	32	37	94	98	99	100
SEP 18...	1500	50	12.5	2910	393	37	40	54	46	95	99	100
OCT 24...	1630	20	25.5	1060	57	48	48	79	91	98	100	--

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	STREAM- FLOW, INSTAN- TANEDUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM
OCT 09...	1850	17	9.0	505	22	56	65	88	94	99	100	--
APR 20...	1400	34	14.5	2830	260	21	28	57	92	97	99	100

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEDUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)
MAR 08...	1545	19	5.5	9030	463
APR 19...	1500	22	12.0	2800	166
MAY 16...	1138	27	14.5	3140	229

TABLE 6.—DESCRIPTIONS OF GROUND-WATER SAMPLING SITES

LSD: Land-surface datum (National Geodetic Vertical Datum of 1929) determined from topographic maps.

Data available: Chemical analyses in table 7; water levels, temperature, and specific conductance in table 8.

Local number (D-11-25)26aab-1, station identification number 395021109044501. Uintah County, Utah. U.S. Geological Survey. Drilled observation well in Douglas Creek Member of Green River Formation. Diam 11 in. (28 cm) to 117 ft (36 m), 8 in. (20 cm) to 798 ft (243 m), depth 798 ft (243 m), casing: 8 in. (20 cm) to 117 ft (36 m), 5 in. (13 cm) to 798 ft (243 m). LSD 5,790 ft (1,765 m).

Data available: Chemical analyses, water level, discharge, temperature, specific conductance.

Local number (D-12-22)1bbb-1, station identification number 394835109243601. Uintah County, Utah. U.S. Geological Survey. Drilled observation well in Douglas Creek Member of Green River Formation. Diam 11 in. (28 cm) to 138 ft (42 m), 8 in. (20 cm) to 1,000 ft (305 m), 4 in. (10 cm) to 1,496 ft (456 m), depth 1,496 ft (456 m), casing: 8 in. (20 cm) to 138 ft (42 m), 5 in. (13 cm) to 1,000 ft (305 m). LSD 5,410 ft (1,649 m).

Data available: Chemical analyses, water level, discharge, temperature, specific conductance.

Local number (D-12-24)19dbc-1, station identification number 394527109162001. Uintah County, Utah. U.S. Geological Survey. Drilled observation well in Douglas Creek Member of Green River Formation. Diam 10 in. (26 cm) to 100 ft (30 m), 6 in. (15 cm) to 800 ft (244 m), 4 in. (10 cm) to 1,402 ft (427 m), depth 1,402 ft (427 m), casing: 7 in. (18 cm) to 100 ft (30 m), 4 in. (10 cm) to 800 ft (244 m). LSD 6,250 ft (1,905 m).

Data available: Chemical analyses, water level, discharge, temperature, specific conductance.

Local number (D-13-21)10aba-1, station identification number 394229109325601. Uintah County, Utah. U.S. Geological Survey. Drilled observation well in Douglas Creek Member of Green River Formation. Diam 11 in. (28 cm) to 150 ft (46 m), 6 in. (15 cm) to 250 ft (76 m), 5 in. (13 cm) to 1,092 ft (333 m), depth 1,092 ft (333 m), casing: 8 in. (20 cm) to 150 ft (46 m), 5 in. (13 cm) to 250 ft (76 m). LSD 5,535 ft (1,687 m).

Data available: Chemical analyses, water level, discharge, temperature, specific conductance.

Local number (D-14-22)2aaa-1, station identification number 393805109245201. Uintah County, Geokinetics, Inc. Drilled domestic well in Douglas Creek Member of Green River Formation. Diam 9 in. (23 cm), depth 1,312 ft (400 m), casing: 10 in. (25 cm) to 20 ft (6 m), 6 in. (15 cm) to 272 ft (83 m), 5 in. (13 cm) to 1,272 ft, 4.5 in. (11 cm) to 1,312 ft (400 m). LSD 6,700 ft (2,042 m).

Data available: Chemical analyses.

Local number (D-16-18)24bcd-S1, station identification number 392510109532801. Grand County, Utah. Pinto Spring. Discharges from Parachute Creek Member of Green River Formation. LSD 7,960 ft (2,426 m).

Data available: Chemical analyses.

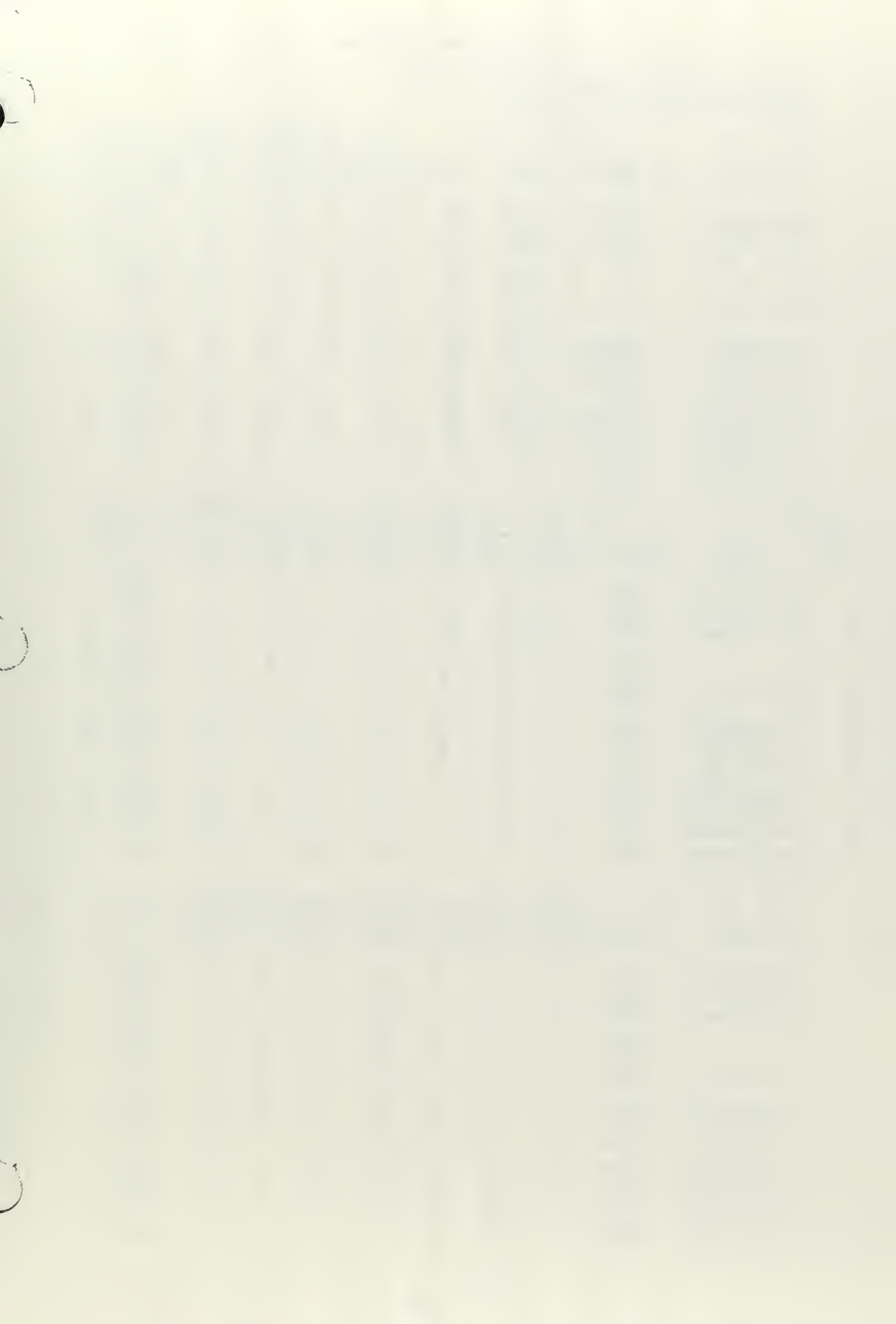


TABLE.7—QUALITY OF GROUND WATER

STATION IDENTIFICATION NUMBER: SEE WELL- AND SPRING-NUMBERING SYSTEM IN TEXT.
 LOCAL NUMBER: SEE WELL- AND SPRING-NUMBERING SYSTEM IN TEXT.
 YIELD (GAL/MIN): MEASURED UNLESS INDICATED E, ESTIMATED.
 SPECIFIC CONDUCTANCE: IN MICROMHOS PER CENTIMETER AT 25°C.

LOCAL NUMBER	STATION IDENTIFICATION NUMBER	DATE OF SAMPLE	TIME	YIELD (GAL/MIN)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CACO3)	
(D-10-24) 17DAD- 1	395651109140201	78-05-26	1030	--	12.0	2170	7.6	--	680	
(D-10-24) 17DAD- 2	395651109140202	78-05-26	1035	--	12.5	1650	7.7	--	310	
(D-11-25) 26AAB- 1	395021109044501	78-04-11	1900	18	15.0	1600	8.5	--	13	
		78-05-23	1610	12	16.5	3640	7.4	.0	910	
(D-12-22) 188B- 1	394835109243901	78-04-03	1000	76	18.0	10900	9.2	--	1300	
		78-04-04	0130	36	21.0	4200	8.0	--	730	
		78-04-07	1545	125	23.5	1370	--	--	14	
		78-05-05	1240	15	23.5	1350	9.0	--	6	
(D-12-24) 1908C- 1	394527109162001	78-03-26	0800	10	10.0	--	9.2	--	360	
		78-03-28	1850	--	22.0	1300	8.6	--	19	
(D-13-19) 13AAD- 2	394126109434902	78-07-03	1045	--	8.5	1030	7.2	--	520	
(D-13-21) 10ABA- 1	394229109325601	78-03-22	0500	200	16.5	900	8.1	--	100	
(D-13-23) 2680C- 1	393929109185001	78-07-07	0830	11	18.5	1130	7.2	--	370	
(D-13-24) 188B- 1	394135109164901	78-06-01	1130	--	7.5	7400	7.4	--	2900	
(D-14-22) 2AAA- 1	393805109245201	78-04-19	1200	--	19.5	940	8.8	<.1	120	
(D-15-23) 36DDD-S1	392800109171001	78-06-27	1400	--	6.0	420	7.7	--	270	
(D-15-24) 108CD-S1	393143109131801	78-06-28	0845	--	9.0	1150	7.4	--	690	
(D-16-18) 248CD-S1	392510109532801	78-08-08	1700	4.5	7.0	380	7.5	--	220	
(D-16-19) 18C8C-S1	392440109515501	78-08-09	0900	13	6.5	420	7.5	--	250	
(D-17-19) 288AB-S1	391832109495001	78-08-09	1530	2.7	6.0	400	7.4	--	210	
(D-18-19) 36CAA-S1	391156109462401	78-08-10	0845	23	5.0	340	7.2	--	180	
(D-18-20) 78AD-S1	391545109451501	78-08-10	1145	18	5.5	300	7.4	--	160	
LOCAL NUMBER	DATE OF SAMPLE	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	BROMIDE DIS- SOLVED (MG/L AS BR)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)
(D-10-24) 17DAD- 1	78-05-26	--	970	48	.3	--	19	--	--	1810
(D-10-24) 17DAD- 2	78-05-26	--	600	38	.2	--	19	--	--	1250
(D-11-25) 26AAB- 1	78-04-11	--	160	36	1.9	--	13	--	--	963
	78-05-23	.0	1800	33	.8	.2	19	3030	--	3070
(D-12-22) 188B- 1	78-04-03	--	4300	280	2.2	--	12	--	--	9870
	78-04-04	--	2000	26	.6	--	14	--	--	3250
	78-04-07	--	260	13	1.2	--	12	--	--	959
	78-05-05	--	150	32	1.9	--	13	--	--	921
(D-12-24) 1908C- 1	78-03-26	--	820	39	.4	--	6.3	--	--	2350
	78-03-28	--	400	7.4	.5	--	8.1	--	--	948
(D-13-19) 13AAD- 2	78-07-03	--	250	18	6.1	--	17	--	--	793
(D-13-21) 10ABA- 1	78-03-22	--	270	9.3	.2	--	10	--	--	651
(D-13-23) 2680C- 1	78-07-07	.2	470	12	.3	.1	8.9	927	--	906
(D-13-24) 188B- 1	78-06-01	--	4600	81	.5	--	9.4	--	--	6670
(D-14-22) 2AAA- 1	78-04-19	.1	320	8.2	.2	.1	17	661	658	661
(D-15-23) 36DDD-S1	78-06-27	--	60	4.2	--	--	17	318	--	319
(D-15-24) 108CD-S1	78-06-28	--	490	11	--	--	22	1030	--	967
(D-16-18) 248CD-S1	78-08-08	--	33	1.7	--	--	19	237	--	256
(D-16-19) 18C8C-S1	78-08-09	.5	84	4.2	.2	.0	22	337	--	332
(D-17-19) 288AB-S1	78-08-09	.0	13	1.5	.1	.1	13	205	--	244
(D-18-19) 36CAA-S1	78-08-10	.7	11	.9	.1	.1	8.5	173	--	204
(D-18-20) 78AD-S1	78-08-10	.2	18	1.2	.1	.1	7.9	170	--	171
LOCAL NUMBER	DATE OF SAMPLE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHROM- IUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PH)
(D-10-24) 17DAD- 1	78-05-26	--	--	--	270	--	--	--	10	--
(D-10-24) 17DAD- 2	78-05-26	--	--	--	260	--	--	--	20	--
(D-11-25) 26AAB- 1	78-04-11	--	--	--	610	--	--	--	20	--
	78-05-23	0	3	0	770	1	0	5	2100	4
(D-12-22) 188B- 1	78-04-03	--	--	--	12000	--	--	--	730	--
	78-04-04	--	--	--	660	--	--	--	60	--
	78-04-07	--	--	--	250	--	--	--	170	--
	78-05-05	--	--	--	460	--	--	--	10	--
(D-12-24) 1908C- 1	78-03-26	--	--	--	1800	--	--	--	40	--
	78-03-28	--	--	--	130	--	--	--	2100	--
(D-13-19) 13AAD- 2	78-07-03	--	--	--	600	--	--	--	110	--
(D-13-21) 10ABA- 1	78-03-22	--	--	--	630	--	--	--	40	--
(D-13-23) 2680C- 1	78-07-07	0	1	200	170	1	10	0	1600	5
(D-13-24) 188B- 1	78-06-01	--	--	--	900	--	--	--	--	--
(D-14-22) 2AAA- 1	78-04-19	0	1	0	70	0	0	0	310	1
(D-15-23) 36DDD-S1	78-06-27	0	--	--	--	--	--	--	10	--
(D-15-24) 108CD-S1	78-06-28	0	--	--	--	--	--	--	20	--
(D-16-18) 248CD-S1	78-08-08	20	--	--	--	--	--	--	10	--
(D-16-19) 18C8C-S1	78-08-09	0	3	200	20	1	0	0	20	2
(D-17-19) 288AB-S1	78-08-09	0	0	300	10	0	0	0	20	0
(D-18-19) 36CAA-S1	78-08-10	0	0	300	8	0	10	0	20	3
(D-18-20) 78AD-S1	78-08-10	0	1	200	8	0	0	0	20	1

TABLE 7—QUALITY GROUND WATER—Continued

DATE OF SAMPLE	HAR- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	
78-05-26	360	150	75	340	52	5.7	3.5	390	0	320	16	
78-05-26	0	95	18	280	66	6.9	3.3	390	0	320	12	
78-04-11	0	4.4	.5	380	98	46	.8	740	--	610	3.7	
78-05-23	510	130	140	690	62	10	1.9	490	0	400	31	
78-04-03	0	6.6	300	3100	84	38	10	1200	1250	3070	3.8	
78-04-04	370	93	120	780	70	13	7.8	430	--	353	6.9	
78-04-07	0	4.5	.7	360	98	42	1.5	620	--	509	--	
78-05-05	0	1.7	.4	360	99	65	.8	700	15	599	1.2	
78-03-26	0	15	79	760	82	17	4.4	1270	--	1040	1.3	
78-03-28	0	4.5	1.8	340	97	34	1.0	370	--	300	1.5	
78-07-03	110	95	68	81	25	1.6	2.6	500	0	410	50	
78-03-22	0	17	15	190	80	8.1	.9	280	--	230	3.6	
78-07-07	120	54	44	190	57	4.7	.7	240	0	200	24	
78-06-01	2500	240	560	890	40	7.2	14	550	0	450	35	
78-04-19	0	13	20	180	77	7.3	.6	170	13	160	.5	
78-06-27	51	56	32	15	11	.4	.8	270	0	220	8.4	
78-06-28	440	160	70	63	17	1.0	1.4	300	0	250	17	
78-08-08	21	59	17	7.2	7	.2	.5	240	0	197	12	
78-08-09	56	68	18	18	14	.5	.6	230	0	190	12	
78-08-09	0	60	15	5.7	6	.2	.5	268	0	220	16	
78-08-10	0	51	12	1.5	2	.1	.6	237	0	194	22	
78-08-10	34	47	9.5	1.7	2	.1	.4	150	0	120	9.6	
DATE OF SAMPLE	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO2)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN+AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS TOTAL (MG/L AS PO4)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)
78-05-26	--	--	--	--	2.1	--	--	--	--	--	.32	.98
78-05-26	--	--	--	--	.25	--	--	--	--	--	.03	.09
78-04-11	--	--	--	--	.12	--	--	--	--	--	.02	.06
78-05-23	.01	.04	.00	.00	.01	.69	.89	.90	.03	.09	.00	.00
78-04-03	--	--	--	--	.05	--	--	--	--	--	--	--
78-04-04	--	--	--	--	.00	--	--	--	--	--	--	--
78-04-07	--	--	--	--	.00	--	--	--	--	--	.01	.03
78-05-05	--	--	--	--	.03	--	--	--	--	--	.03	.09
78-03-26	--	--	--	--	.20	--	--	--	--	--	.00	.00
78-03-28	--	--	--	--	.02	--	--	--	--	--	.00	.00
78-07-03	--	--	--	--	1.7	--	--	--	--	--	.09	.28
78-03-22	--	--	--	--	.08	--	--	--	--	--	.00	.00
78-07-07	.38	1.7	.01	.03	.39	.01	.01	.24	.01	.03	.01	.03
78-06-01	--	--	--	--	.04	--	--	--	--	--	.01	.03
78-04-19	.01	.04	.00	.00	.01	.12	.15	.52	3.7	11	.00	.00
78-06-27	--	--	--	--	--	--	--	--	--	--	--	--
78-06-28	--	--	--	--	--	--	--	--	--	--	--	--
78-08-08	--	--	--	--	--	--	--	--	--	--	--	--
78-08-09	.50	2.2	.00	.00	.50	.00	.00	.68	.03	.09	.02	.06
78-08-09	.45	2.0	.00	.00	.45	.00	.00	.27	.01	.03	.00	.00
78-08-10	.16	.71	.00	.00	.16	.00	.00	.04	.01	.03	.01	.03
78-08-10	2.3	10	.00	.00	2.3	.00	.00	.22	.01	.03	.01	.03
DATE OF SAMPLE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	SELE- NIUM, DIS- SOLVED (UG/L AS SF)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	CADMI- UM, DIS- SOLVED (MG/L AS C)	GROSS BETA, DIS- SOLVED (PC/L CS-137)	GROSS BETA, DIS- SOLVED (PC/L AS SR/ YT-90)	
78-05-26	--	600	--	--	--	--	--	--	--	--	--	
78-05-26	--	380	--	--	--	--	--	--	--	--	--	
78-04-11	--	0	--	--	--	--	--	--	--	--	--	
78-05-23	260	700	.0	11	0	6800	.0	300	3.9	<8.5	--	
78-04-03	--	40	--	--	--	--	--	--	--	--	--	
78-04-04	--	50	--	--	--	--	--	--	--	--	--	
78-04-07	--	20	--	--	--	--	--	--	--	--	--	
78-05-05	--	10	--	--	--	--	--	--	--	--	--	
78-03-26	--	60	--	--	--	--	--	--	--	--	--	
78-03-28	--	60	--	--	--	--	--	--	--	--	--	
78-07-03	--	40	--	--	--	--	--	--	--	--	--	
78-03-22	--	10	--	--	--	--	--	--	--	--	--	
78-07-07	40	20	.0	2	0	3800	.0	30	2.4	<3.4	<3.1	
78-06-01	--	740	--	--	--	--	--	--	--	--	--	
78-04-19	30	20	.0	3	0	4800	1.0	30	.5	<1.9	<1.7	
78-06-27	--	--	--	--	--	400	--	--	--	--	--	
78-06-28	--	--	--	--	--	2100	--	--	--	--	--	
78-08-08	--	--	--	--	--	--	--	--	--	--	--	
78-08-09	4	0	.0	10	2	740	2.3	10	--	<1.1	<1.1	
78-08-09	6	0	.0	0	0	380	.0	10	--	1.3	1.2	
78-08-10	8	10	.0	0	1	300	.0	10	--	.9	.9	
78-08-10	6	0	.0	1	0	300	.0	10	--	1.2	1.1	

TABLE 8.--WATER LEVELS, TEMPERATURE, AND SPECIFIC CONDUCTANCE IN SELECTED WELLS

Water level: In feet below or above (+) land-surface datum. A, well being pumped; B, well recently flowed; C, flowing well; D, dry.

Water temperature: In °C (degrees Celsius).

Specific conductance: In micromhos per centimeter at 25°C.

Date	Water level	Temperature	Specific conductance	Date	Water level	Temperature	Specific conductance
Local number (D-9-22)11abb-1.				Local number (D-10-22)17aad-1.			
Oct. 11, 1977	11.19	13.5	2,350	July 3, 1978	(C)	23.5	10,300
Feb. 8, 1978	11.09	12.0	2,720	Local number (D-10-23)23dbd-1.			
Local number (D-9-22)11abb-2.				Oct. 18, 1977	8.37	13.0	4,220
Oct. 11, 1977	12.34	14.0	1,560	Feb. 15, 1978	8.09	10.5	4,550
Feb. 8, 1978	12.26	11.5	1,790	Mar. 16,	8.14	--	--
Local number (D-9-22)11dac-1.				July 13	7.10	--	--
Oct. 11, 1977	10.39	12.5	850	Local number (D-10-23)23dbd-2.			
Feb. 8, 1978	10.33	12.5	900	Oct. 18, 1977	8.52	13.0	2,500
Local number (D-9-22)11dac-2.				Feb. 15, 1978	8.19	10.5	2,600
Oct. 11, 1977	10.55	13.5	670	Mar. 16	8.15	--	--
Feb. 8, 1978	10.49	13.0	740	July 13	7.09	--	--
Local number (D-10-20)15deb-1.				Local number (D-10-23)23dbd-3.			
Nov. 8, 1977	21.93	10.5	9,500	Oct. 18, 1977	8.65	12.0	3,550
Dec. 20	21.58	--	--	Feb. 15, 1978	8.36	9.5	3,600
Feb. 2, 1978	20.81	11.0	9,300	Mar. 16	8.37	--	--
Mar. 17	21.55	--	--	July 13	7.33	--	--
June 15	21.95	12.0	9,700	Local number (D-10-23)24baa-1.			
Local number (D-10-20)15deb-2.				Oct. 18, 1977	27.10	13.0	1,330
Nov. 8, 1977	22.58	10.5	12,000	Feb. 15, 1978	26.56	12.5	1,400
Dec. 20	22.15	--	--	Mar. 16	26.53	--	--
Feb. 2, 1978	21.60	11.0	12,000	July 13	24.59	--	--
Mar. 17	21.29	--	--	Local number (D-10-24)13aca-1.			
June 15	22.39	12.5	12,300	Oct. 13, 1977	0.61	13.0	4,430
Local number (D-10-20)35bbc-1.				Dec. 7	0.42	--	--
Apr. 24, 1978	(C)	29.5	3,980	Mar. 16, 1978	0.32	7.0	3,300
Local number (D-10-21)8cdc-1.				May 26	0.39	11.0	4,600
Oct. 28, 1977	0.31	13.0	1,900	Local number (D-10-24)17dad-1.			
Feb. 1, 1978	1.65	11.5	2,000	Oct. 18, 1977	14.28	12.15	4,300
Mar. 24	+0.30	--	--	Feb. 22, 1978	13.72	12.0	2,900
June 15	1.65	13.5	1,840	Mar. 16	13.75	12.0	2,320
Local number (D-10-21)8cdc-2.				May 26	12.27	12.0	2,170
Oct. 28, 1977	10.44	13.5	2,200	Local number (D-10-24)17dad-2.			
Feb. 1, 1978	10.79	13.0	2,200	Oct. 18, 1977	16.23	13.0	1,850
Mar. 24	9.65	--	--	Feb. 22, 1978	15.70	12.5	1,680
June 15	10.75	13.5	2,160	Mar. 16	15.73	12.5	1,480
Local number (D-10-21)16add-1.				May 26	14.26	12.5	1,650
Apr. 24, 1978	(C)	33.0	3,480	Local number (D-10-25)7aac-1.			
Local number (D-10-22)10ada-1.				Oct. 18, 1977	10.26	11.0	880
Oct. 28, 1977	20.00	13.0	18,500	Feb. 7, 1978	9.54	9.5	1,000
Feb. 2, 1978	19.81	12.0	17,800	Mar. 16	10.06	--	--
Mar. 24	19.60	--	--	June 13	7.61	10.5	880
May 11	19.76	13.5	17,700				

TABLE 8.--WATER LEVELS, TEMPERATURE, AND SPECIFIC CONDUCTANCE IN SELECTED WELLS--Continued

Date	Water level	Temperature	Specific conductance	Date	Water level	Temperature	Specific conductance
Local number (D-10-25)7aac-2.				Local number (D-11-25)21cbc-2.			
Oct. 18, 1977	10.26	14.5	910	Oct. 12, 1977	11.13	11.0	4,520
Feb. 7, 1978	9.49	8.5	1,020	Dec. 7	10.57	--	--
Mar. 16	10.07	--	--	Feb. 28, 1978	9.50	8.5	4,550
June 13	7.60	10.5	910	Mar. 24	9.40	--	--
Local number (D-10-25)8aca-1.				June 14	10.34	9.0	4,550
Oct. 12, 1977	14.64	12.0	2,300	Local number (D-11-25)26aab-1			
Mar. 3, 1978	14.26	11.0	2,100	Apr. 12, 1978	124.22	--	--
Mar. 24	13.06	--	--	May 22	122.18	--	--
June 13	14.18	12.5	2,170	May 23	(A)	16.5	3,680
Local number (D-10-25)8aca-2.				Local number (D-12-22)1bbb-1.			
Oct. 12, 1977	13.95	12.0	2,570	Apr. 18, 1978	+109.00	--	--
Mar. 3, 1978	13.58	11.5	2,250	May 5	(C)	23.5	1,350
Mar. 24	12.26	--	--	Local number (D-12-23)21ccd-1.			
June 13	13.43	12.5	2,370	Oct. 27, 1977	16.05	10.5	8,300
Local number (D-11-19)24acc-1.				Feb. 23, 1978	14.73	10.5	8,200
Nov. 8, 1977	21.63	10.5	6,600	Mar. 16	14.46	--	--
Dec. 20	21.70	--	--	Local number (D-12-23)21ccd-2.			
Jan. 24, 1978	21.28	10.5	6,700	Oct. 27, 1977	16.48	12.0	15,000
Mar. 17	20.99	--	--	Feb. 23	15.23	10.0	15,000
May 12	20.41	11.5	6,350	Mar. 16	15.18	--	--
Local number (D-11-21)7aca-1.				Local number (D-12-24)19dbc-1			
Apr. 24, 1978	(C)	16.0	1,820	Mar. 28, 1978	(A)	22.0	1,300
Local number (D-11-21)21cad-1.				Apr. 4	554.00	--	--
Oct. 19, 1977	184.23	--	--	Local number (D-12-25)2daa-1.			
Jan. 25, 1978	184.62	--	--	Oct. 12, 1977	24.70	10.5	4,200
Mar. 24	184.81	--	--	Feb. 28, 1978	23.64	10.5	4,080
Local number (D-11-22)26ddc-1.				Mar. 24	23.88	--	--
Oct. 27, 1977	68.45	11.0	14,600	June 14	24.58	11.5	4,300
Dec. 6	69.33	--	--	Local number (D-13-19)13aad-1.			
Feb. 2, 1978	70.30	10.0	14,400	Nov. 8, 1977	28.68	9.5	1,770
Mar. 15	70.86	--	--	Dec. 20	29.64	--	--
Mar. 24	70.79	--	--	Jan. 24, 1978	28.95	10.0	2,000
Apr. 18	70.23	--	--	Mar. 17	23.57	--	--
May 5	69.89	--	--	May 12	21.63	9.5	1,550
May 11	69.66	11.5	14,000	July 3	21.72	10.5	1,450
July 13	69.47	--	--	Local number (D-13-19)13aad-2.			
Local number (D-11-24)7acd-1.				Nov. 8, 1977	27.10	7.0	930
July 19, 1978	+140.00B	--	--	Dec. 20	28.09	--	--
Local number (D-11-25)21cbc-1.				Jan. 24, 1978	30.28	8.0	1,170
Oct. 12, 1977	12.07	10.5	4,200	Mar. 17	25.22	--	--
Dec. 7	11.45	--	--	May 12	23.30	9.0	1,140
Feb. 28, 1978	10.56	9.0	4,120	July 3	23.40	8.5	1,030
Mar. 24	10.50	--	--				
June 14	11.26	10.0	4,300				

TABLE 8.--WATER LEVELS, TEMPERATURE, AND SPECIFIC CONDUCTANCE IN SELECTED WELLS--Continued

Date	Water level	Temperature	Specific conductance	Date	Water level	Temperature	Specific conductance
Local number (D-13-21)10aba-1.				Local number (D-13-23)26bdc-1.			
Mar. 22, 1978	(A)	16.5	900	Oct. 19, 1977	382.89	--	--
Mar. 31	11.01	--	--	Jan. 20, 1978	382.47	--	--
Apr. 19	11.01	--	--	July 6	380.54	18.5	1,130
Local number (D-13-21)15adc-1.				Local number (D-13-23)27cab-1.			
Nov. 8, 1977	12.70	10.5	1,350	Oct. 19, 1977	112.37	--	--
Dec. 6	15.17	--	--	Oct. 26	112.41	--	--
Jan. 25, 1978	11.95	10.5	1,570	Jan. 19, 1978	112.12	13.0	4,400
Mar. 17	12.07	--	--	Local number (D-13-24)18bbb-1.			
Apr. 19	11.75	--	--	Oct. 26, 1977	41.19	8.5	3,900
Local number (D-13-21)15adc-2.				Dec. 6	42.74	--	--
Nov. 8, 1977	16.97	9.5	2,170	Feb. 23, 1978	45.07	5.5	4,000
Dec. 6	16.85	--	--	Mar. 16	45.32	--	--
Jan. 25, 1978	16.42	11.5	2,700	Apr. 18	41.78	--	--
Mar. 17	15.93	--	--	June 1	35.93	7.5	7,400
Apr. 19	15.58	--	--	Local number (D-13-24)18bbb-2.			
Local number (D-13-23)9aac-1.				Oct. 26, 1977	(D)	--	--
Oct. 26, 1977	16.15	11.5	6,500	Dec. 6	(D)	--	--
Feb. 23, 1978	15.50	11.5	6,300	Feb. 23, 1978	(D)	--	--
Mar. 16	15.45	--	--	Mar. 16	(D)	--	--
June 1	15.57	12.0	6,400	Apr. 18	(D)	--	--
Local number (D-13-23)9aac-2.				June 1	35.05	7.5	4,350
Oct. 26, 1977	17.02	11.0	19,200				
Feb. 23	16.48	10.0	20,000				
Mar. 16, 1978	16.50	--	--				
June 1	16.49	11.0	21,000				